

COUNTWAY LIBRARY



HC 317 2

BOSTON
MEDICAL LIBRARY
8 THE FENWAY

THE JOURNAL

OF THE

MEDICAL ASSOCIATION OF GEORGIA

Owned and Controlled by the Medical Association of Georgia
PUBLISHED MONTHLY under direction of the Council
Copyright 1950 by the Medical Association of Georgia

Number 1
Volume XXXIX

Atlanta, Georgia, January, 1950

Single Copy, \$1.00
Per Year - - \$5.00

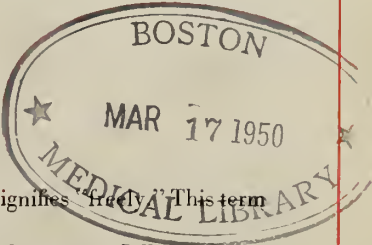
CONTENTS

Congenital Intrinsic Duodenal Obstruction. LON GROVE, M.D., and EARL RASMUSSEN, M.D., Atlanta.....	1
Burns. J. D. MARTIN, JR., M.D., RICHARD CAUDLE, M.D., and J. M. B. BLOODWORTH, JR., M.D., Atlanta	10
Goiter: Hashimoto Type. T. C. DAVISON, M.D., and A. H. LETTON, M.D., Atlanta.....	19
Acute Pancreatitis. WILLIAM G. WHITAKER, JR., M.D., Atlanta.....	26
Right Thoracic Approach in Combination with Laparotomy for Resection of Cancer of the Esophagus at the Level of the Arch of the Aorta. RICHARD KING, M.D., Atlanta.....	30
Public Relations: Good and Bad. ENOCH CALAWAY, M.D., LaGrange.....	33

(Continued on Page VI)

Entered as second class mail at the Post Office at Atlanta, Ga., under the Act of March 3, 1879.
Accepted for mailing at the general rate of postage provided for in Section 1103, Act. of Oct. 6, 1917, authorized Nov. 14, 1928.

ad lib.



... in a prescription signifies "freely." This term
also has an important bearing on Lilly products,
for information concerning their use, though
withheld from unprofessional channels, is freely
given to physicians. Eli Lilly and Company sup-
ports the mutual interests of physician and patient.

ELI LILLY AND COMPANY • INDIANAPOLIS 6, INDIANA, U. S. A.

*"Superior hemostatic effect...
upon venous and
capillary
oozing" **

Oxycel

Oxidized Cellulose

Parke-Davis



*Ault, G. W. & Madigan, E. P.: Am. J. Surg., 77:352, 1949.

WHY MANY LEADING NOSE AND THROAT SPECIALISTS SUGGEST

"change to PHILIP MORRIS"*

Where smoking is a factor in a throat condition,
the physician may advise "Don't Smoke."

But where the patient persists, many eminent
specialists suggest "Change to PHILIP MORRIS"...
the one cigarette proved definitely less irritating.**

Perhaps you too will find it advantageous
to suggest to your throat patients

"Change to PHILIP MORRIS." For your
own smoking as well, Doctor, in fact for all
smokers, Philip Morris is by far the wisest choice.



PHILIP MORRIS

Philip Morris & Co., Ltd., Inc.
119 Fifth Avenue, N. Y.

IF YOU SMOKE A PIPE... We suggest an
unusually fine new blend—COUNTRY DOCTOR PIPE
MIXTURE. Made by the same process as used in
the manufacture of Philip Morris Cigarettes.

*Completely documented evidence on file.

**Reprints on Request:

Laryngoscope, Feb. 1935, Vol. XLV, No. 2, 149-154;
Laryngoscope, Jan. 1937, Vol. XLVII, No. 1, 58-60;
Proc. Soc. Exp. Biol. and Med., 1934, 32,241; N. Y.
State Journ. Med., Vol. 35, 6-1-25, No. 11, 590-592.

EDITORIALS

Medical Dues, 1950	34
A. M. A. Membership Not Compulsory for Enrollment in Local Groups	34
Whooping Cough Yields to Antibiotic Drug	34
'Tired Feeling' is Major American Disease	35
Attribute Relief from Shaking Palsy to Psychotherapy.....	35
Worry	35
Name of Hygeia, Health Magazine, to be Changed to Today's Health	36
Are We Neglecting Skin Tumors?.....	36
Portrait of Dr. Fischer Unveiled at the Crawford Long Hospital	37

GEORGIA DEPARTMENT OF PUBLIC HEALTH

The Prevention of Congenital Syphilis. RUDOLPH W. JONES, JR., M.D., Atlanta.....	38
---	----

MISCELLANEOUS

Healthgram.	
A.M.A. Offers Health Education Service to Schools.	
New York Ranks First in Hospital Facilities for Polio.	
News Items.	
Communications.	
Obituary.	
Find Streptomycin Effective Against Bacillary Dysentery.	
Help Your Mind Help You.	
Army Medical Department Announces Development of "Dramamine" Seasickness Preventive and Cure.	
Breathing Through Your Nose.	
Book Reviews.	

**BRAWNER'S SANITARIUM**

Established 1910

SMYRNA, GEORGIA (Suburb of Atlanta)

FOR NERVOUS AND MENTAL DISORDERS, DRUG AND ALCOHOL ADDICTIONSALBERT F. BRAWNER, M.D.
Department for Men

JAMES N. BRAWNER, M.D. Medical Director

JAMES N. BRAWNER, JR., M.D.
Department for Women

THE JOURNAL OF THE MEDICAL ASSOCIATION OF GEORGIA

PUBLISHED MONTHLY under direction of the Council

Vol. XXXIX

Atlanta, Georgia, January, 1950

No. 1

CONGENITAL INTRINSIC DUODENAL OBSTRUCTION *Report of 9 Cases*

LON GROVE, M.D.
EARL RASMUSSEN, M.D.
Atlanta

Congenital duodenal obstruction is a relatively rare anomaly; however, during recent years more and more cases have appeared in the literature, and the number of successfully treated cases is likewise increasing. There have been several single-case reports, but in only a few instances has there been anything approaching a series. Calder, in 1733, first described congenital obstruction in the upper gastro-intestinal tract of the newborn, and Ernst¹ of Copenhagen in 1916 first reported the successful treatment of a case of duodenal obstruction which was congenital in origin. In 1945, Ladd and Swenson² reported 21 cases of intrinsic duodenal obstruction with 13 recoveries after operation. Stetten³ has reported the youngest infant treated successfully by operation, a 3 day-old, one month premature boy.

It has been estimated that this anomaly occurs about once in 20,000 infants, and in 15 per cent the obstruction in the duodenum is associated with complete or incomplete obstruction elsewhere in the gastro-intestinal tract. Apparently there is no predilection for race or sex, and a familial incidence has not been striking; however, in 1940 Brodsky⁴ reported two cases of atresia of the duodenum in consecutive female

members of the same family.

Embryology: Prior to the second month of fetal life, there is a definitely established lumen in the gastro-intestinal tract. Due to epithelial conrescences from a rapid epithelial proliferation, the lumen of the gastro-intestinal tract, from the esophagus to the ileocecal valve, becomes obliterated and is converted to an almost solid organ. After the eighth week numerous vacuoles appear, coalesce, and a larger lumen is established. Persistence or exaggeration of the normally constricted condition of the embryonic lumen produces congenital atresia⁵.

Pathology: Three distinct pathologic conditions resulting in intrinsic duodenal obstruction in the infant have been reported. These include: (1) a diaphragm-like septum with or without a small opening or perforation, (2) a cord-like structure of small to no caliber connecting two partially blind ends of the duodenum, and (3) a complete division of the duodenum into two blind ends. By far, the majority of these anomalies have occurred distal to the papilla of Vater, in the second and third portions of the duodenum. The extrinsic factors resulting in congenital duodenal obstruction may be peritoneal bands and adhesions, torsion, volvulus, anomalous blood vessels, tumors, cysts, and persistence of the hepatoduodenocolic ligament after rotation of the stomach and duodenum⁶. Donovan³ has stated that both types of lesion are often associated with some error of rotation of the embryonic midgut loop.

Clinical findings: The clinical findings and symptoms vary with the degree of ob-

Read before the Medical Association of Georgia in annual session, Savannah, May 12, 1949.

struction. If the obstruction is complete, vomiting occurs within the first 24 hours and, as the atresia is generally below the papilla, the vomitus usually contains bile. It is not uncommon to find old and sometimes fresh blood in the vomitus as we have observed this on several occasions. The vomiting may occur any time from immediately to 2 or 3 hours after feedings and usually becomes progressively more intense and frequent. Other signs and symptoms of a high obstruction become evident. Dehydration may be marked if the lost fluids are not replaced. Distention and peristaltic waves may or may not be present depending on the length of time the infant has gone untreated. The stools are smaller in amount and at times are nothing more than a small diaper stain which may be observed on only one or two occasions. They are usually dry, grayish in appearance and may contain a small amount of mucus. With lesser degrees of obstruction, vomiting may be periodic and delayed for several days or weeks.

We have utilized a thin mixture of barium for x-ray study in almost all instances. There have been no complications due to this procedure. Immediately following x-ray study all barium proximal to the obstruction is removed by lavage. In one instance air study was used for diagnosis. Mullins and Milman⁷ in 1946 described the method of roentgen diagnosis of congenital duodenal obstruction by the insufflation of air. Gastric contents are aspirated following a plain x-ray of the abdomen. Air is introduced under fluoroscopic observation and spot and serial x-rays at hour intervals are taken to differentiate complete from incomplete obstruction. If the obstruction is complete, there is a complete absence of gas beyond the duodenum. There may be a small gas pattern if the obstruction is incomplete. Kantz, Lisa and Kraft⁸ have pointed out that peristalsis in the stomach and duo-

denum is usually poor and, if the stomach and duodenum are greatly distended, there may be an hour-glass appearance.

Preoperative treatment: Infants with complete duodenal obstruction obviously cannot survive unless some type of corrective surgery is instituted. As soon as the diagnosis is suspected, a small catheter is placed into the stomach for constant decompression. Fluids, blood, proteins and vitamins are replaced as soon as possible. In our experience, the ultimate outcome has depended to a very great extent on the early recognition and treatment of this condition together with the absence of other congenital anomalies or complications such as pneumonia.

Discussion of cases: Since 1938 there have been 9 cases of congenital duodenal obstruction admitted to the Henrietta Eggleston Memorial Hospital. Surgery was performed in 6 instances and all 6 infants survived and were discharged from the hospital in satisfactory condition. The remaining 3 infants died before surgery could be undertaken. One baby died at 6 days of age from pneumonia and atresia of second portion of duodenum, and the second case died at the age of 14 days, was a Mongolian idiot and an atresia was present in the first portion of the duodenum. The third case died at 7 days of age and autopsy revealed congenital cardiac anomalies and an almost complete stenosis of the second portion of the duodenum.

Of the 6 infants undergoing surgery, 4 were females and 2 were males. There were 3 atresias and 3 incomplete duodenal obstructions or stenoses in this group. The 3 cases of stenoses underwent surgery on the 17th, 8th and 10th day of life respectively. All 3 cases of atresia had surgery on the 7th day of life. The duodenal obstruction in five instances was located in the second or third portion of the duodenum. In the sixth case there was a stenosis in the first

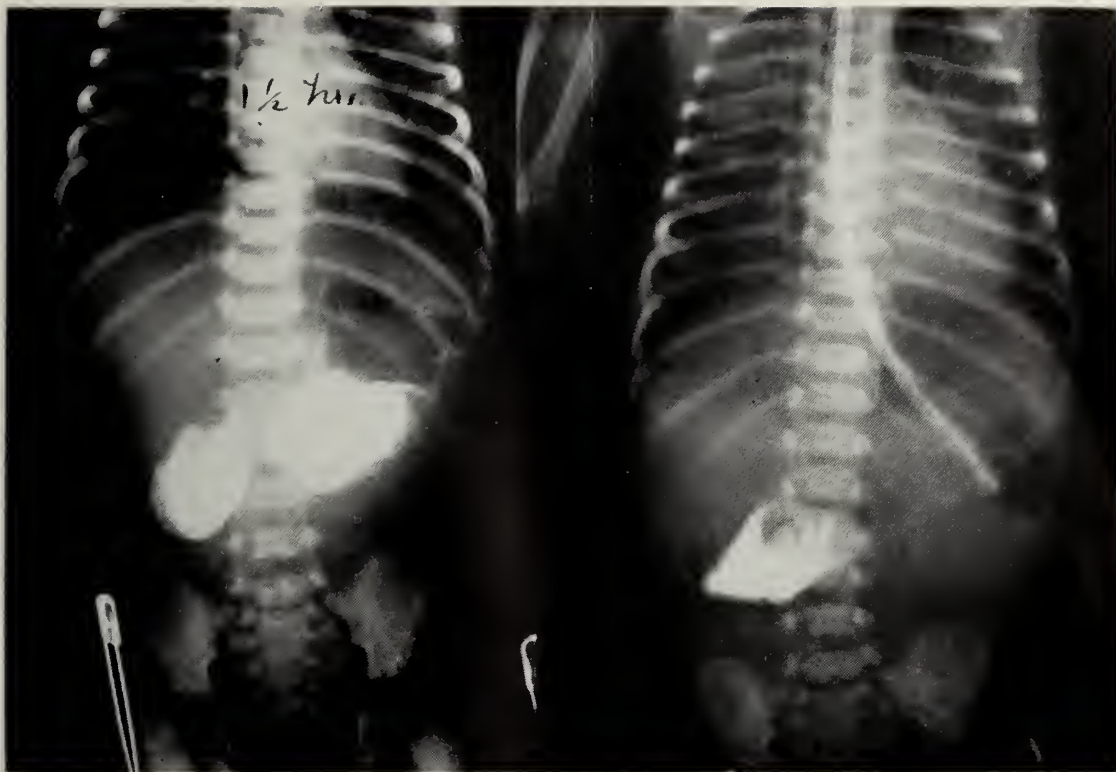


Fig. 1. Case 1—Atresia of second portion of duodenum.

part of the duodenum.

Drop ether was the anesthesia used in all cases. Retrocolic duodenojejunosomy was performed on three occasions, antecolic gastrojejunostomy was performed twice and an antecolic duodenojejunosomy performed once. Blood is always given these infants during the operative procedure.

Postoperative treatment: Constant gastric decompression is maintained for the first 24 to 48 hours following surgery, during which time nutrition is maintained by parenteral feedings. A formula is started on the second or third day and gradually increased. Ladd and Gross⁸ recommend the frequent use of saline enemas for dilatation of the colon. Constant care and diligent nursing is an absolute necessity in the postoperative care of these babies. It may become necessary at any time to reinstitute gastric decompression if vomiting persists.

The proper management of these cases requires the constant cooperation of the

surgeon, pediatrician, roentgenologist and house staff.

REPORT OF CASES

Case 1. S. A. N., a fairly well developed, 3-day-old infant girl was admitted to the hospital July 2, 1945 with a diagnosis of intestinal obstruction. The baby was delivered at term by forceps after a difficult labor and appeared normal at birth but began to vomit bile-stained fluid after 12 hours. The baby failed to nurse at breast and was started on subcutaneous fluids and supplementary feedings but continued to vomit after each feeding. On admission to the hospital, the child was vomiting a moderate amount of old blood; temperature rose steadily and respiration became labored and rapid.

Physical examination: The general appearance was that of a markedly dehydrated, acutely ill 3-day-old infant girl. The skin and mucous membranes were dry. No petechiae were present. The heart was normal. There were numerous moist rales in both lungs. The remainder of the physical examination was deferred.

Laboratory: RBC 4,500,000, Hb. 63 per cent, 11.5 Gm., WBC 7,200, 52 pmn's, 48 lymphocytes, 7 nucleated RBC's. Vomitus was positive for occult blood.

On the day after admission there was almost a continuous flow of greenish-black vomitus, the infant was very weak and there were areas of pallor alternating with dull red blotches in the skin. The fontanels did not bulge but felt a little firm. When the baby was disturbed, there seemed to be athetoid movements of the arms and some spasticity of the lower extremities. There was no nystagmus nor twitchings. There were fine, moist and crepitant rales scattered over both lungs. There was no enlargement of the spleen, liver or glands.

X-rays revealed bilateral pneumonia and no gas pattern below the stomach. A thin barium meal revealed duodenal obstruction in the second portion, probably distal to the ampulla.

The baby received Vitamin K, oxygen, subcutaneous

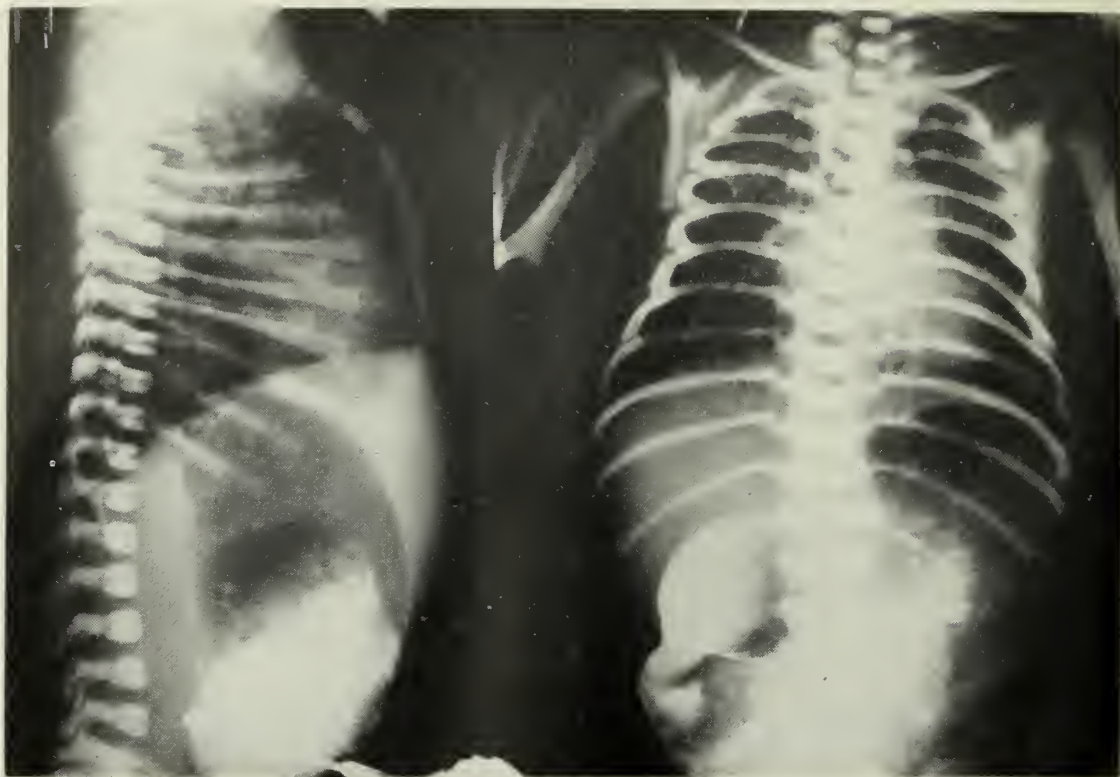


Fig. 2. Case 2—Stenosis of second portion of duodenum.

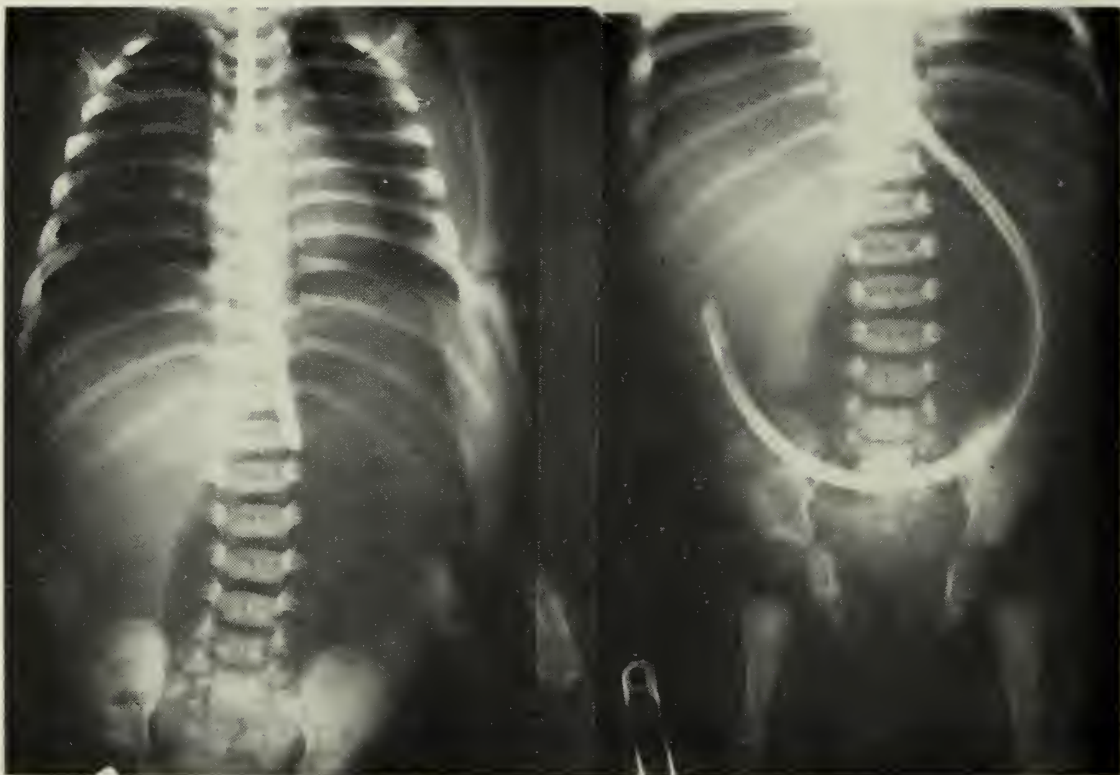


Fig. 3. Case 3—Atresia of first portion of duodenum.

fluids and one transfusion of 40 cc. whole blood. The baby died on the third hospital day without surgery. There was no autopsy.

Case 2. R. V. R., a 48-hour-old infant boy was ad-

mitted to the hospital April 9, 1943 with the complaint of vomiting and periods of apnea.

Family history: Father's age 24 years, alive and well. Mother's age 20 years. One pregnancy, no history

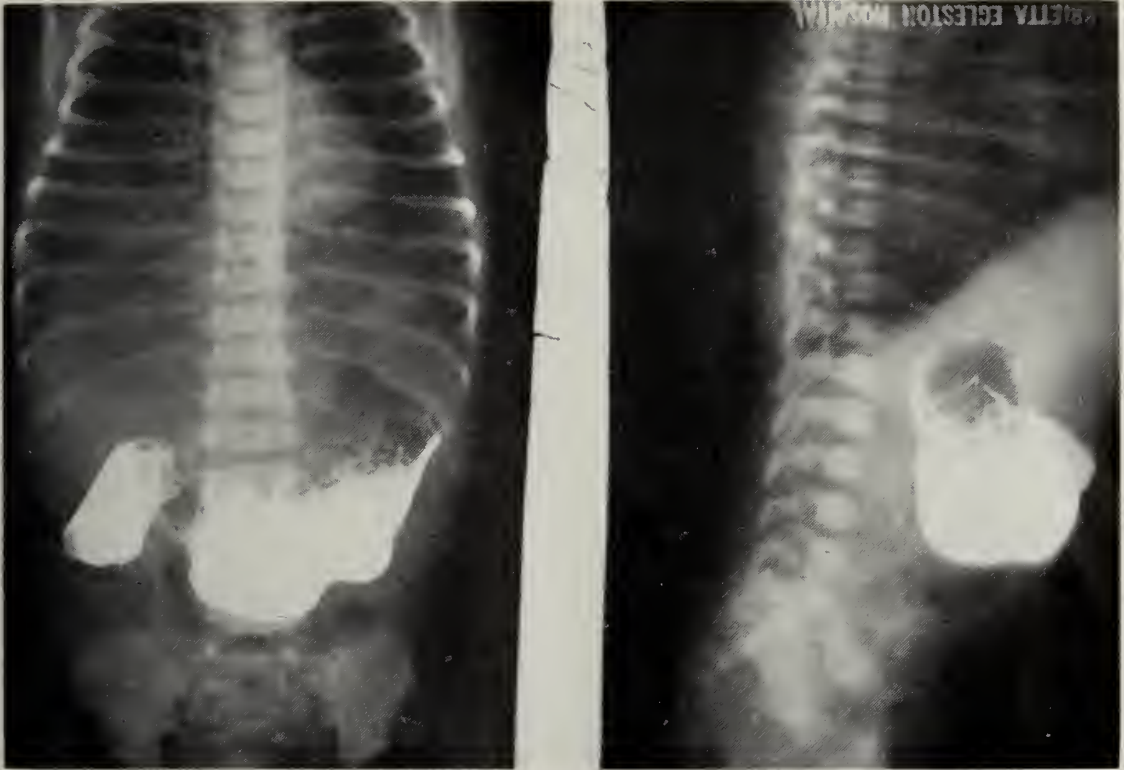


Fig. 4. Case 5—Stenosis of second portion of duodenum.

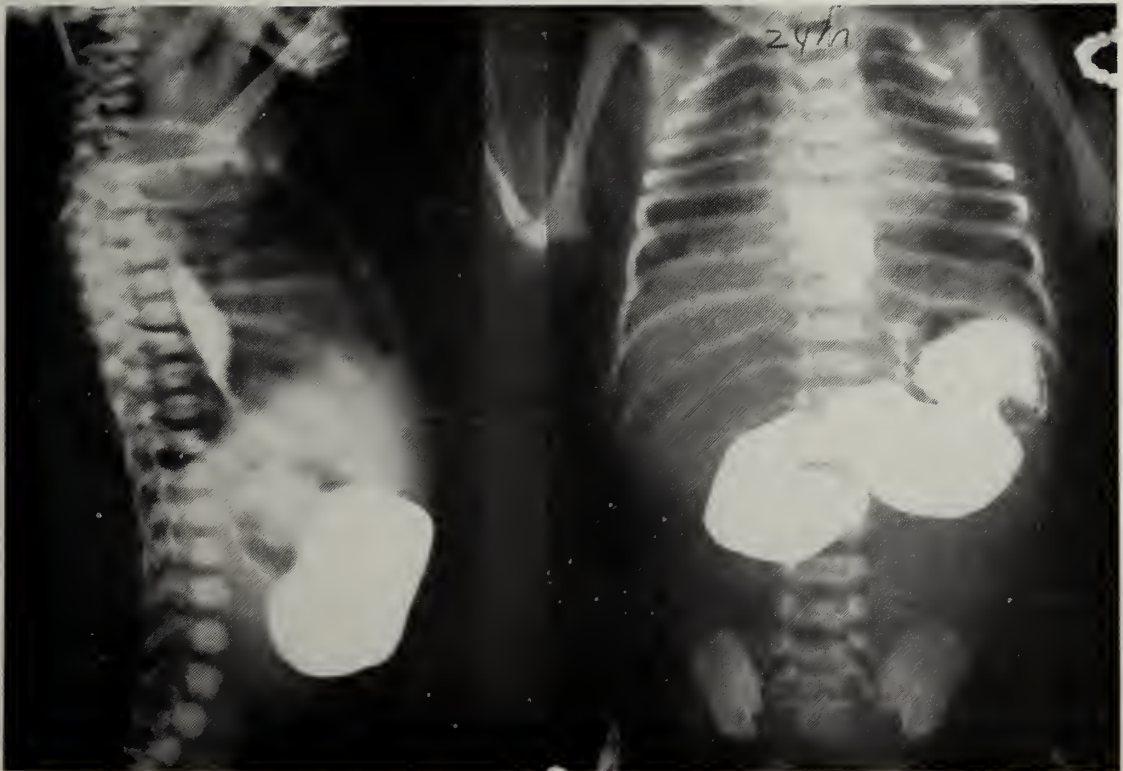


Fig. 5. Case 6—Atresia of third portion of duodenum.

of tuberculosis or syphilis. Paternal grandfather had asthma.

Past history: Birth April 7, 1943. Had hard labor about 3 hours, hydramnios, breech. Weight about 7

lbs. Length of pregnancy 9 months. Condition of child following birth was poor and he failed to nurse. No specific infections, no immunizations, sleeps fairly well. Bowels moved during delivery but did not move after

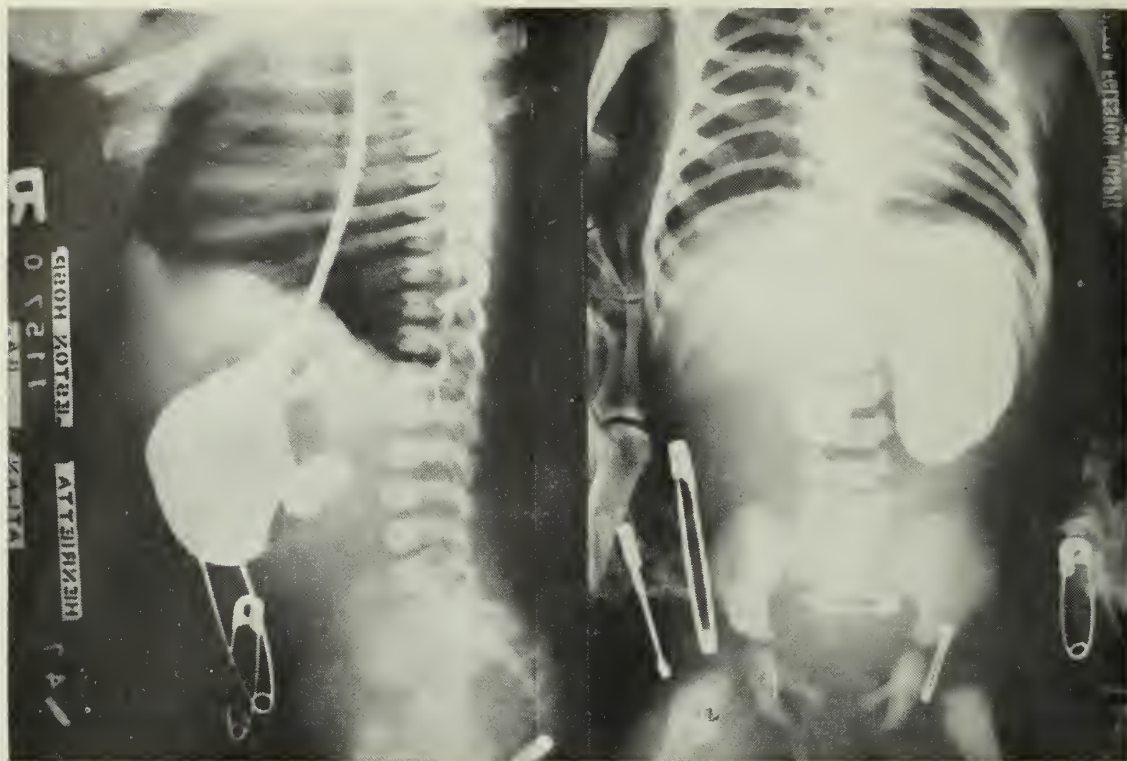


Fig. 6. Case 7—Atresia of second portion of duodenum.

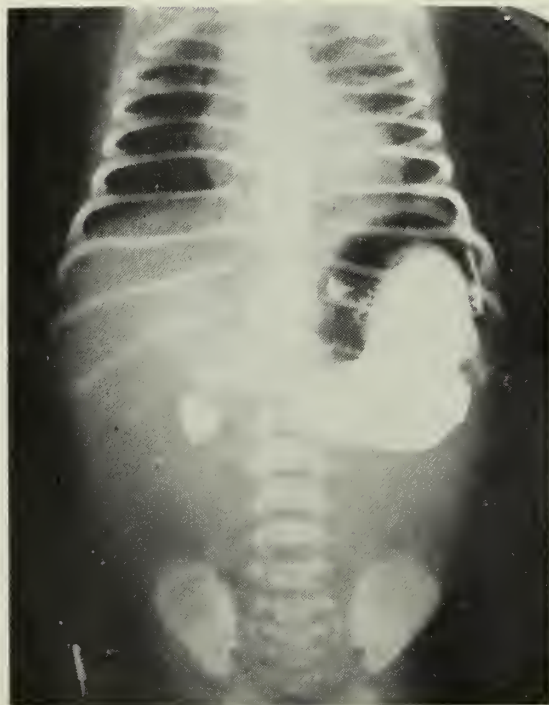


Fig. 7. Case 8—Atresia of second portion of duodenum.

that time.

Present illness: Baby born 2 days prior to admission to hospital. Delivery was breech and the head was delivered easily by manual extraction. Mother had hydramnios and the baby was full of amniotic fluid, was not breathing and the heart beat was not discernible. After about 10 to 15 minutes an occasional gasp was obtained. The baby vomited everything taken by

mouth. When the infant slept there were intermittent periods of apnea.

Physical examination: General appearance was that of a well-developed and well-nourished 2-day-old baby. Skin and mucous membranes were moderately dry and there was mild cyanosis. No glands were palpable. The head appeared larger than normal and measured 14 inches in circumference. The sutures were slightly overriding and seemed to be ossified. Pupils were equal in size and reacted equally well to light. Ears, nose, throat, mouth and neck were negative. The lungs were clear and no cardiac abnormalities could be detected. The abdomen, extremities and genitalia were negative.

Laboratory: Urine: acid, 2 plus albumin, sugar neg., 6-8 WBC, occ. RBC. 3-6 coarse granular casts, 1-2 pus cell casts. Blood: 5,370,000 RBC, 18.5 Gm. Hb., 11,400 WBC, 47 segs., 11 bands, 6 juveniles, 31 lymphocytes, 5 eosinophils, 56 nucleated RBC. Insufficient quantity for blood Kahn. Tuberculin test negative.

X-ray: Skull: Skull large as compared to the face. Parietal bones are fully calcified and overlap slightly at the fontanel. Chest: Both lungs show fetal atelectasis and are poorly expanded.

The child was given barium which passed into the stomach readily. At 24 hours the stomach retained all of the barium and was dilated to at least twice the normal size. The pylorus appeared open and the first portion of the duodenum was dilated. No gas was seen in the small or large bowel.

The baby received subcutaneous fluids and nasal O₂ but became progressively more cyanotic and died on the 5th hospital day.

Autopsy: Heart and cardiovascular system: patent ductus, right atrium distended with blood. Thin flap of membrane over foramen ovale with questionable functional patency. A ventricular defect involving the anterior flap of the mitral valve through which the flap was attached to the endocardium of the other ventricle. The defect also communicated above the mitral valve with both atrial cavities.

Gastro-intestinal tract: Stomach tremendously dilated and filled with undigested material. The proximal por-

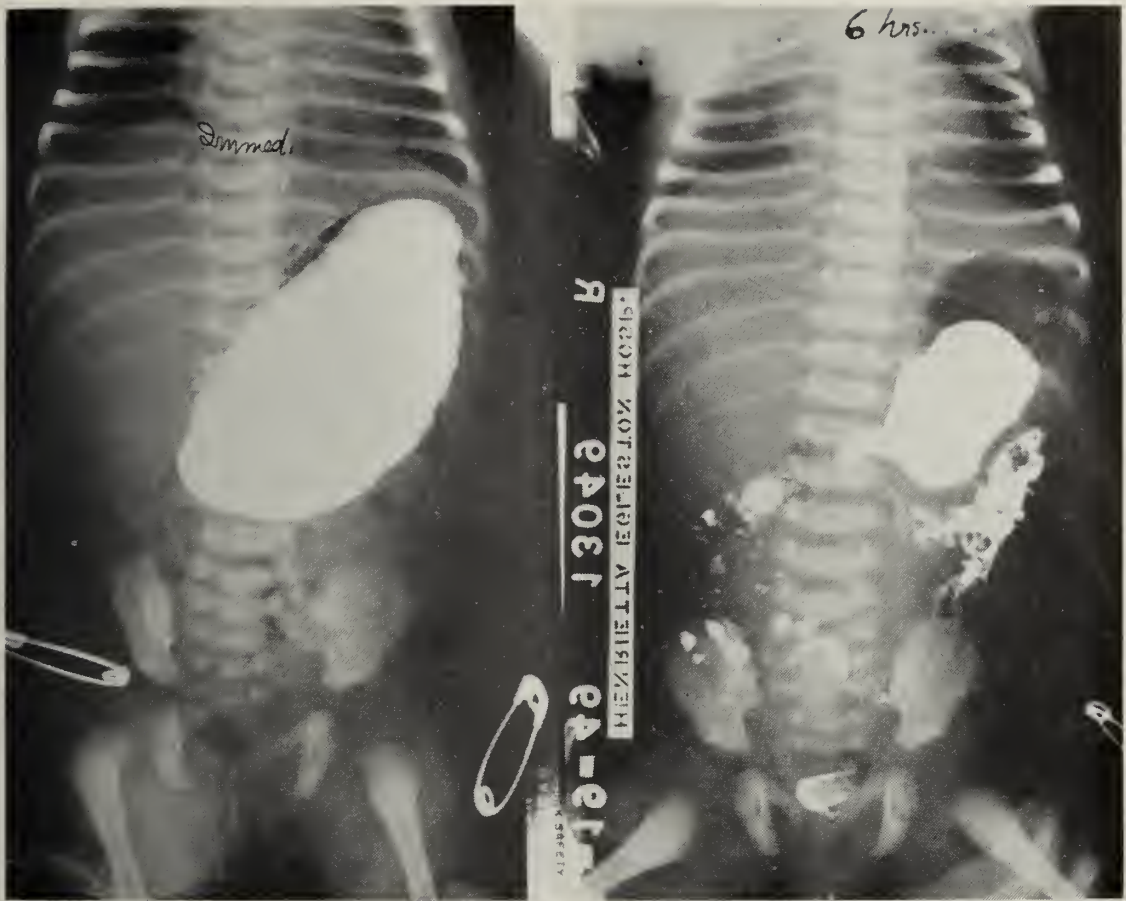


Fig. 8. Case 9—Stenosis of first portion of duodenum.

tion of the duodenum, 2.5 cm. from the pylorus, was also greatly dilated and ended in a deep pouch 6 cm. in diameter. There was a small valve-like flap in the terminal end of the pouch through which a probe could barely be passed. There was marked collapse of the remainder of the tract. No other congenital anomalies of the G.I. tract were apparent.

Case 3. T. C. D., a 3-day-old infant boy was admitted to the hospital August 16, 1945 with history of vomiting since birth.

Family history: Father's age 38 years, living and well. Mother's age 39; 9 former pregnancies, 7 children living and well, 2 miscarriages and no stillbirths. No history of tuberculosis or syphilis. Mother had questionable asthma.

Past history: Infant born at home August 13, 1945. Character of birth was apparently normal. Birth weight was 7 lbs. Length of pregnancy was full-term. Condition following birth was good.

Present illness: The infant had vomited everything he had taken since birth. Retained water for about 15 to 20 minutes for first 2 days of life. The day prior to admission, blood was noted in vomitus. He had had no bowel movement since birth. There had been mild jaundice noted for two days.

Physical examination: The general appearance was that of an acutely ill, moderately dehydrated and jaundiced infant with definite Mongolian appearance. Skin and mucous membranes revealed mild jaundice and moderate dehydration. The fontanels were open and sunken. The nose revealed dried blood on mucous membrane. The abdomen was not distended and peristalsis was absent. The remainder of physical examination was negative.

Laboratory: Blood: 5,040,000 RBC, 15.5 Gm., Hb. 90 per cent Hb., WBC 13,700, 78 pmn's, 22 lymphocytes. Blood Kahn was negative.

X-rays: Aspiration of stomach and insufflation of air under fluoroscopic observation revealed a markedly dilated stomach following which a diagnosis of complete obstruction in first portion of duodenum was made.

Diagnosis of Mongolism confirmed. Despite supportive treatment by subcutaneous fluids, transfusions, etc., the baby went steadily downhill and died on the 11th hospital day without surgery.

Autopsy: Atresia of first portion of the duodenum.

Case 4. M. A. W., a 16-day-old infant girl admitted to the hospital November 10, 1938 with history of vomiting since fourth day of life.

Family history: Father's age 35 years, living and well. Mother's age 32. No history of tuberculosis, syphilis or allergy.

Present illness: The baby began to vomit immediately after each breast feeding, beginning on the fourth day after birth. During the week preceding hospitalization, the baby began to lose weight, but retained one to two feedings each day and continued to have bowel movements.

Physical examination: The general appearance was that of a well developed and fairly well-nourished 16-day-old infant girl. Skin and mucous membranes revealed only slight dehydration. The remainder of the physical examination was negative.

X-rays revealed a large duodenal and gastric residue four hours following barium meal. After 24 hours there was still a small amount of barium present in the stomach and duodenum, and the remainder was scattered throughout the colon.

Operation: November 11, 1938. Drop ether anesthesia. Right rectus muscle-splitting incision. The stomach and duodenum were dilated and the duodenum was found to be obstructed after it had passed through the fetal mesentery of the ascending colon. A retrocolic duodenojejunostomy was performed.

The baby was taking a formula well by the fifth postoperative day and was discharged from the hospital on the 14th postoperative day in good condition. On December 13, 1938, 32 days following surgery, the baby returned to the hospital with history of vomiting for the past 3 days. A laparotomy was performed the following day and an adhesive band was found to have completely obstructed the ileum. Following release of the adhesion, the child had an uneventful convalescence and was discharged on the 15th postoperative day in good condition.

Case 5. M. C. B., a 7-day-old infant girl was admitted to the hospital August 22, 1944 with history of jaundice and vomiting since birth.

Family history: Father's age 43 years. Mother's age 34 years. Three former pregnancies which were apparently normal. No stillbirths, no miscarriages. There was no history of tuberculosis, syphilis or allergy.

Past history: Baby born August 15, 1944. Character of birth was spontaneous, delivery on an unsterile field. Birth weight 5 lbs., 15 oz. Length of pregnancy was nine months and condition following birth was good. Infant had been jaundiced since birth.

Present illness: The infant was delivered at another hospital where she remained for 5 days. Breast feedings were attempted during that period but the baby always vomited half an hour to one hour after each feeding. The baby was taken home where it continued to vomit. During 48 hours prior to admission to hospital, jaundice lessened.

Physical examination: General appearance was that of a fairly well-developed but poorly nourished 7-day-old infant girl. Skin and mucous membranes revealed marked dehydration and slight jaundice. The anterior and posterior fontanels were open and depressed and the bones were overriding at the suture line. Sclerae were moderately jaundiced. There was a vertical nystagmus. Liver was palpated 2.5 cm. below the costal margin on right side and the abdomen was moderately distended. There was some spasticity and intermittent convulsive movements of all extremities. The baby had a small stool containing bile on the day after admission.

Laboratory: Urine: sp. gr. 1020, reaction alkaline, albumin 2 plus, sugar 1 plus, diacetic acid negative, 1-2 WBC, occasional RBC. Blood: 7,000,000 RBC, 165 per cent Hb., 25 grams Hb., WBC 22,800, 59 pmn's., 37 lymphocytes, 2 eosinophils, 2 lymphoblasts. Blood Kahn negative. Stomach washings revealed bile to be present.

X-rays: Thin barium meal revealed complete obstruction to barium at second portion of the duodenum. There was a small gas pattern distal to the duodenum.

Operation: August 24, 1944. Drop ether anesthesia. Right rectus muscle-splitting incision. The stomach and first portion of duodenum were markedly dilated and an obstruction was apparent in the third portion of the duodenum at ligament of Treitz. A retrocolic duodenojejunostomy was performed.

The baby did very well following surgery and was taking a formula very satisfactorily by the 5th postoperative day. Convalescence was without event except for a wound infection which cleared rapidly and the baby was discharged on the 13th postoperative day. The child was seen again on November 15, 1944 at which time she was developing normally, taking feedings well with only occasional regurgitation. Weight was 10 lbs., 6 ozs. When the baby was seen April 13, 1945 she was 8 months old, weighed 20 lbs. and had not vomited since the last visit.

Case 6. B. M. B., a 6-day-old infant boy was admitted to the hospital June 12, 1946 with history of vomiting since first day of life.

Family history: Father's age 39, living and well. Mother's age 28. One brother and one sister living and in good health. No history of tuberculosis, syphilis or allergy.

Past history: Baby born June 6, 1946. Character of birth was normal and birth weight was 5 lbs., 10 ozs. Pregnancy was full-term, condition following birth was good and baby was immediately put on breast and formula.

Present illness: On the first day of life the infant vomited a small amount of its feeding immediately after nursing. There was only a small amount of regurgitation on the second day; however, on the third day all feedings were vomited immediately to one-half hour after nursing. The baby refused breast on the fourth day and subcutaneous fluids were given. The infant continued to vomit each feeding on the fifth and sixth days and it was necessary to maintain nutrition by use of subcutaneous fluids. The vomitus on almost all occasions contained some bile.

Physical examination: General appearance was that of a well-developed, moderately well-nourished 6-day-old baby boy. The skin and mucous membranes revealed moderate dehydration and mild jaundice. The remainder of the physical examination was negative except for vigorous peristalsis which could be felt in the upper abdomen.

Laboratory: Urine: sp. gr. 1025, reaction acid, sugar, albumin and diacetic acid negative, occasional WBC, hyaline and granular cast. Blood: 5,350,000 RBC, 89 per cent Hb., WBC 12,650, 32 pmn's., 64 lymphocytes, 4 eosinophils.

X-rays: Thin barium meal revealed complete duodenal obstruction, dilatation of proximal duodenum, stomach and esophagus and no gas pattern below the obstruction. No barium had passed the obstruction after 24 hours.

Operation: June 13, 1946. Drop ether anesthesia. High right rectus muscle-splitting incision. Duodenum was markedly dilated with obstruction apparent in the third portion. The remainder of the gastro-intestinal tract was markedly collapsed and no other abnormalities were evident. A retrocolic duodenojejunostomy was performed.

The baby did well following surgery and on the second postoperative day was taking a formula fairly well, regurgitating only a small amount on three occasions during the 24 hours. Infant developed a moderate diarrhea on the fifth day, but recovered and was discharged on the 7th postoperative day in good condition. He was taking a formula well.

Case 7. M. R. L., a 6-day-old infant boy admitted to the hospital March 6, 1947 with history of vomiting since birth.

Family history: Father's age 28 years, living and well. Mother's age 20 years. Pregnancies: Male infant, died at 3 months (of colitis); one girl 5 years old, living and well. No stillbirths or miscarriages. No history of syphilis, tuberculosis or allergy.

Past history: Infant born February 28, 1947. Character of birth was normal and birth weight was 8 lbs., 12 ozs. Length of pregnancy was full-term and condition following birth was good. Feedings consisted of breast and supplement for first day days. There were no specific infections, no exposure to contagious diseases and no immunizations. Bowels moved meconium for 3 days.

Present illness: Baby had vomited everything since birth, immediately after nursing and frequently between nursings. Vomiting was never with force, was dark, almost black in color, with foul odor. Bowel movements were meconium for first 3 days and during 48 hours prior to admission to hospital no bowel movements were evident. Urine was very scant during

2 days preceding hospitalization.

Physical examination: Temperature 101.4 F. Height 20 inches. Weight 6 lbs., 10½ ozs. General appearance was that of a well-developed, poorly nourished, pale, dehydrated infant boy. Skin and mucous membranes were quite pale and moderately dehydrated. Remainder of physical examination was essentially negative. The baby was regurgitating black liquid material at frequent intervals. The abdomen revealed no distention or masses.

Laboratory: Urine: sp. gr. 1006, reaction acid, albumin 1 plus, sugar, faint trace; diacetic acid negative, 1-2 WBC and occasional RBC. Blood: RBC 5,610,000, 130 per cent Hb., 22 Gm. Hb., WBC 18,900, 82 pmn's, 11 lymphocytes, 3 monocytes, 4 eosinophils. Blood Kahn negative.

X-ray: Thin barium meal revealed complete duodenal obstruction, probably distal to entrance of common duct. There was no evidence of gas distal to the obstruction.

Operation: March 7, 1947. Drop ether anesthesia. High right rectus muscle-splitting incision. The stomach and proximal duodenum were dilated and obstruction was apparent in the second portion of the duodenum. The remaining gastro-intestinal tract, including the colon, was collapsed and no additional abnormalities were evident. An antero-colic duodenojejunostomy was performed.

The baby did well postoperatively. Hydration and nutrition were maintained by parenteral route for first two postoperative days. Formula was started on the third postoperative day which the baby took fairly well, had a fairly normal stool the same day. The baby regurgitated several times during the next few days and it was necessary to supplement formula with subcutaneous fluids, but he continued to gain weight and condition remained good. The baby was taking formula fairly well by the 10th day, but continued to regurgitate small amounts several times during the day. Nevertheless, he was discharged on the 12th postoperative day in good condition. Was seen again May 22, 1947 at which time he was developing normally, was not vomiting and his weight was 12 lbs., 5 ozs.

Case 8. M. P. C., a 6-day-old infant girl admitted to the hospital June 16, 1948 with history of vomiting since birth.

Family history: Father's age 29, living and well. Mother's age 29. One former pregnancy, male, 2½ years, living and well. No stillbirths or miscarriages, no history of tuberculosis, syphilis or allergy.

Past history: Infant born June 9, 1948, non-instrumental vertex presentation. Birth weight was 8 lbs., 3 ozs., and condition following birth was good. There was no history of contagious diseases and there had been no immunizations. Local pediatrician had given the baby mild sedative prior to admission.

Present illness: The baby had vomited every feeding since birth. The vomitus was always greenish in color and projectile on only one occasion. Vomiting occurred from 5 to 30 minutes following each feeding. The local pediatrician began to give the child parenteral feedings 3 days prior to hospitalization. The father stated that the child had never had a bowel movement.

Physical examination: Weight 7 lbs. General appearance was that of a well-developed and fairly well-nourished 6-day-old infant girl. Skin and mucous membranes revealed mild dehydration. The child was very drowsy and cried only after painful stimulation. The abdomen was slightly distended and no rushed peristalsis was audible. The remainder of physical examination was negative.

Laboratory: Urine: sp. gr. 1016, reaction alkaline, albumin 1 plus, sugar 2 plus, diacetic acid negative, 1 to 3 WBC. Blood: 6,000,000, RBC, 18 Gm. Hb., WBC 13,900, 58 pmn's, 25 lymphocytes, 3 monocytes, 14 eosinophils.

X-ray: X-ray films were brought into hospital with the patient. Barium meal and x-rays had been taken 24 hours previously and the barium was still pooled in the stomach and first and second portion of the duodenum. There was no barium or gas beyond the obstruction.

Operation: June 17, 1948. Drop ether anesthesia. High right rectus muscle-splitting incision. The first portion of the duodenum was moderately distended. Obstruction was apparent at second portion of duodenum. The remainder of the gastro-intestinal tract, including the colon, was completely collapsed. An antero-colic gastrojejunostomy was performed.

The baby did well following operation and was given a formula on the 3rd postoperative day. She was discharged on the 10th postoperative day in good condition and regurgitating a small amount of her feed-

TABLE 1
CONGENITAL INTRINSIC DUODENAL OBSTRUCTION

Case	Sex	Type of Obstruction	Site of Obstruction	Operative Procedure	Result
S.A.N.	F	Atresia	2nd Portion	None	Died, age 6 days
R.V.R.	M	Stenosis	2nd Portion	None	Died, age 7 days
T.G.D.	M	Atresia	1st Portion	None	Died, age 14 days
M.A.W.	F	Stenosis	3rd Portion	Retrocolic-duodenojejunostomy	Recovery
M.C.B.	F	Stenosis	2nd Portion	Retrocolic-duodenojejunostomy	Recovery
B.M.B.	M	Atresia	3rd Portion	Retrocolic-duodenojejunostomy	Recovery
M.R.L.	M	Atresia	2nd Portion	Anterocolic-duodenojejunostomy	Recovery
M.P.C.	F	Atresia	2nd Portion	Anterocolic-gastrojejunostomy	Recovery
M.G.A.	F	Stenosis	1st Portion	Anterocolic-gastrojejunostomy	Recovery

ing once or twice each day. Was seen again July 21, 1948, at which time her weight was 7 lbs., 10½ ozs., and she was doing well except for persistent regurgitation of small amount once or twice daily.

Case 9. M. G. A., a 6-hour-infant girl admitted to the hospital February 17, 1949 with history of cyanosis since birth.

Family history: Father's age 23. Mother's age 18 years. This was the first pregnancy. No history of tuberculosis, syphilis or allergy.

Past history: Baby born February 17, 1949. Character of birth was normal and birth weight was 6 lbs., 10 ozs. The baby was markedly cyanotic following delivery.

Physical examination: The general appearance was that of a well-developed, fairly well-nourished white female who was intensely cyanotic about the head and neck. Cyanosis was most marked in skin of head and shoulders. Hands and arms, trunk and lower extremities were of fair color. Lungs were poorly aerated with many scattered rales and rhonchi. Remainder of physical examination was negative.

Following admission to the hospital the baby vomited everything taken by mouth despite change in formula and antispasmodics.

Laboratory: Urine: sp. gr. 1010, reaction acid, sugar and albumin negative, 1-2 WBC. Blood: 7,100,000 RBC, 26 grams Hb., 9,900 WBC.

X-ray: February 21, 1949. Almost complete obstruction at pylorus. About 25 per cent gastric residue at 52 hours. Patchy atelectasis present in both lungs.

Operation: February 24, 1949. Drop ether anesthesia. High right rectus muscle-splitting incision. Stomach markedly dilated, no evidence of hypertrophic stenosis of pylorus. Stenosis present in first portion of duodenum. An antero-colic gastroduodenostomy was performed.

Patient did fairly well following surgery and a formula was started on the 2nd postoperative day. The baby continued to vomit three to four times each day and it was necessary to supplement feedings with parenteral fluids for the first seven postoperative days. The baby continued to regurgitate once or twice each day, but gained weight to 7 lbs., 12 ozs., and was allowed to return home three weeks following surgery. After the baby had been home for two weeks she was brought back to the hospital with history of continued regurgitation of one to two feedings each day. After observation in the hospital for one week, she improved, retained all of her feedings and was allowed to return home again.

Summary

1. There is an increasing number of successfully treated cases of congenital duodenal obstruction being reported in the literature.

2. The embryology, pathology, clinical findings and treatment of this anomaly are discussed.

3. A total of 9 cases of congenital duodenal obstruction are presented. Six cases underwent surgery and all survived and were discharged from the hospital in satisfactory condition. In this group there were three atresias and three stenoses. Three infants died prior to surgery.

4. A successful result depends to a very

great extent on the early recognition and treatment of this condition together with the absence of other congenital anomalies or complications.

REFERENCES

1. Ernst, W. P.: A Case of Congenital Atresia of the Duodenum Treated Successfully by Operation, *Brit. M. J.* 1:644-645 (May 6) 1916.
2. Swenson, O., and Ladd, W. E.: Surgical Emergencies of the Alimentary Tract of the Newborn, *New England J. Med.* 233:660 (Nov. 29) 1945.
3. Stetten, DeWitt: Duodenojejunostomy for Congenital Intrinsic Total Atresia at Duodenojejunal Junction, *Ann. Surg.* 111:583-596 (April) 1940. Discussion by W. E. Lee and E. J. Donovan.
4. Brodsky, I.: Atresia of Duodenum. Report in Three Cases Including Two in Consecutive Female Members of the Same Family, *Australian & New Zealand J. Surg.* 9:405-422, 1940.
5. Jordan, H. E., and Kindred, J. E.: *Textbook of Embryology*, ed. 5, New York, D. Appleton Century Company, 1948.
6. Kantz, F. G.; Lisa, J. R., and Kraft, E.: Congenital Duodenal Obstruction; Report of Six Cases and Review of Literature, *Radiology* 46:334-342 (April) 1946.
7. Mullins, H. Z., and Milman, Doris H.: Congenital Duodenal Obstruction. Roentgen Diagnosis by Insufflation of Air, *Am. J. Dis. Child.* 72:81-88 (July) 1946.
8. Ladd, W. E., and Gross, R. E.: *Abdominal Surgery of Infancy and Childhood*, Philadelphia, W. B. Saunders Company, 1941.

BURNS

J. D. MARTIN, JR., M.D.

RICHARD CAUDLE, M.D.

J. M. B. BLOODWORTH, JR., M.D.

Atlanta

During the recent war and immediately thereafter, progress was made in the therapy of burns. The knowledge of the fundamental pathologic processes has remained the same. There has been essentially no improvement in the mortality rate since the formation of the concepts, which were established by Underhill, Blalock, and later re-emphasized by Davidson¹. The therapy of burns has varied to the present time with foremost attention directed to the general manifestations, giving the local lesion a less important rôle. The classification of burns still holds an elementary but important place in understanding the associated pathologic changes and the rendering of an accurate prognosis.

Shock, which is essentially the same as that manifested by most forms of trauma, is of great importance in the treatment of

From the Whitehead Department of Surgery, Emory University School of Medicine, Emory University, Georgia.
Read before the Medical Association of Georgia in annual session, Savannah, May 12, 1949.

burns. The so-called toxic phase, or that which immediately follows the shock, needs little explanation except that it is limited in a great measure by the initial therapy, the extent of the burn, and the depth of involvement. The septic period has been lessened by the use of sulfonamides and antibiotics. Even with present therapy, complications occurring in the third stage still are important in the control of morbidity and mortality.

The pathologic changes should be considered with reference to the various stages of involvement. The first stage is essentially that of secondary traumatic shock, the clinical manifestations of which are well known as comprising hemoconcentration, decreased blood volume and diminished cardiac output. There is a widespread loss of the circulating fluid which carries electrolytes and proteins to the tissues, thereby depleting the body of these essential elements used in the maintenance of body nutrition. A negative nitrogen balance soon occurs which may proceed to a severe depletion. The loss of blood chlorides may be significant. Due to the hemoconcentration and the inefficient oxygen carriage of the blood, the tissue cells become anoxic and there follows varying degrees of cell necrosis. The main damage occurs in the liver, kidneys, brain, and heart muscle. If the process is allowed to continue, dysfunction of these organs rapidly occurs. Toxemia may result from a multiplicity of factors, such as anoxia, acidosis, azotemia, infection, anemia, and nitrogen imbalance. In addition, it is still considered that toxin may be produced by burn tissue.

The significance of the shock accompanying burns cannot be underestimated. The degree and the duration are of particular importance in the prognosis. By Lund and Browder's classification², all children who have an eight per cent or more body surface

burn and adults with greater than 15 per cent body surface burn can be expected to develop shock³. Burns involving the face and neck are accompanied by greater shock and have the additional hazard of a superimposed respiratory burn with laryngeal edema or tracheal compression from subcutaneous edema¹⁰.

In the presence of local tissue destruction, the potassium ion is thought to be released from the cell^{4 5}. The sodium ion migrates into the damaged cells to replace the potassium ion⁶, and is there bound and unavailable for body needs. This apparently is more evident in deep burns, particularly those involving muscles. Red cells are either destroyed, sludged, or partially injured with an increased fragility. Deep capillaries are damaged locally, causing extravasation of serum. Iron becomes deposited around the area of a burn⁷. Histamine-like substances are liberated from the damaged cells and may account for the hyperemia of the gastro-intestinal tract. In the presence of hyperemia and hemoconcentration in dogs and rabbits, ulcerations of the gastro-intestinal tract are much more readily produced with administration of histamine⁸.

The diminution of circulating blood volume roughly parallels the surface area burned. If the urine output is less than 25 cc. per hour in the early post-burn stage, shock is considered. It has been shown that renal circulation in shock may be reduced as much as 1/20 of normal, while cardiac output is reduced to 1/2 to 3/5 of normal⁹. Blood pressure is a poor indicator of shock, particularly in the presence of hemoconcentration. The blood pressure may be held to an apparently normal level until almost complete circulatory failure intervenes from decreased blood volume. Increased peripheral resistance from the viscosity accompanying hemoconcentration allows the pressure to remain elevated in the presence of

diminished cardiac output¹⁰.

Plasma loss is greater than red cell mass loss, varying in degree with the depth of the burn, since deeper burns cause proportionately greater red cell loss¹¹. A mild burn may result in the loss of only five per cent of the circulating blood volume, while a severe deep burn may result in 30 to 35 per cent loss in a few hours¹². If the hematocrit is not increased, the degree of fluid lost in the proportion of plasma to red cells is not known. The same difficulty is encountered in the presence of anemia.

Hemoconcentration results in an increased viscosity and decreased cardiac output. In spite of the hemoconcentration, the tissues are poorly oxygenated because of slowed blood flow. However, a patient may live with a hematocrit as high as 60 if the circulating fluid volume has been kept normal.

Hemoglobinemia may be present, which may result in kidney damage and deposition of hematin pigment in the lower nephrons and collecting tubules¹³. This condition is described as the lower nephron syndrome; clinically, it is manifested by a reduction in urinary output to less than 500 cc. following the shock period. The urine is usually acid with a low specific gravity. Azotemia is present, largely made up of an undetermined fraction¹⁴. Most patients with hemoglobinemia surviving the initial 10 to 12 days, usually recover. Shock, dehydration, and kidney damage are contributing factors to the frequently developed acidosis.

A false anemia of hemodilution and increased plasma volume is seen after the initial period of hemoconcentration. True, anemia results from loss of red blood cells at the site of the burn at the time of injury. Blood is lost from the granulating surface with drainage and redressings. There is also a deposition of iron surrounding the

area of a burn, rendering it unavailable for hematopoiesis. Low body proteins diminish the source of material for manufacture of red cells. Prolonged shock, acidosis, uremia, infection, and toxemia all have an effect upon the bone marrow⁷. Anemia is frequently refractive to treatment until granulating surfaces are covered and chronic infection eliminated.

A decreased plasma protein may be found as a result of loss in the tissue space; decreased intake, and poor assimilation because of liver damage. A negative nitrogen balance of proportionate severity will be seen with most patients having greater than 10 per cent body surface involved¹⁵. This is thought to result from the sloughing of destroyed tissue, excess excretion of protein waste products, and poor utilization of available protein. Intestinal absorption of protein diminishes in the immediate post-burn period and remains diminished until mucosal edema and hemorrhage are absorbed. Much protein is lost into the tissue spaces and becomes unavailable for tissue metabolism. As food intake is increased, nitrogen excretion diminishes and usually reverts to normal within three weeks¹⁶.

Infection is almost always seen locally and is usually limited to tissues devitalized by the original burn. The majority of pathogenic organisms present are staphylococcus, alpha streptococcus, bacillus subtilis, diphtheroids¹⁷, and usually bacillus pyocyaneus. The necrotic slough of a burn offers excellent media for growth of *B. Tetani*. Infection may become systemic, resulting in septicemia or multiple metastatic abscesses.

Organs distant to the site of the burn undergo pathologic alteration, the kidney being notable among these. The liver shows marked cloudy swelling and focal necrosis¹⁸. Also, focal hemorrhages of the gastrointestinal mucosa, myocardium, brain, and adrenal glands are frequently seen with the

more severe burns¹⁹.

In a series of experiments, Cournard²⁰ showed that whole blood restores oxygen transportation to the tissues, thereby aiding recovery better than plasma, saline, or concentrated serum albumin. Whole blood transfusions have been used for many years in the treatment of burns, shock, and subsequent anemia, but its widespread use was hampered at first by lack of indirect methods of administration and later by the popularity of plasma. Plasma was readily accepted since it appeared to be an exact replacement of the fluid lost.

Many investigators^{21 22 23 24 25} have proclaimed the value of whole blood. The benefits of its use may be summarized as follows:

(a) Whole blood contains nearly twice as much protein as plasma, thereby exacting a greater sparing action on body proteins.

(b) There is less tendency to develop pulmonary edema than when large amounts of electrolytes are given.

(c) It restores all deficits of circulating fluid volume better than any other single agent, since the fluid lost is equivalent to anemic blood.

(d) It helps to prevent toxemia.

(e) In controlling shock, the possibility of kidney damage, cerebral anoxemia, and damages to liver and bone marrow are reduced.

Moyer, in 1944, using a group of experimentally scalded dogs, found that the longest shock survival was in those given a combination of two to five per cent body weight of blood intravenously and 10 to 15 per cent body weight of a mixture of two-thirds normal saline and one-third M/6 sodium bicarbonate by mouth²¹.

Undue hemoconcentration can be avoided if large amounts of electrolyte solution are given orally to provide adequate interstitial fluid. A small amount of plasma may be given intravenously in the presence of hematocrit over 60. The circulating fluid must be adequately replaced, for it has been shown by Blalock²⁶ and Seligman¹⁰ that shock in the presence of hemoconcentration is much more serious than simple shock from hemorrhage.

Rosenthal, in a series of experiments with burned mice^{4 5 27} found that normal saline

given orally in amounts of 10 to 15 per cent body weight was very effective in controlling shock. The National Research Council in 1945 recommended a mixture of two-thirds normal saline and one-third M/6 sodium lactate²⁸. These mixtures are formulated to give isotonic concentrations of sodium and chloride in order to prevent acidosis.

Following the initial shock period, the daily intake of fluid should probably not exceed output until all evidences of acute kidney damage have been removed. Transfusions of whole blood should be continued as long as there is evidence of anemia, particularly in preparation for grafting.

Penicillin, streptomycin, and sulfadiazine should be administered from the beginning. There are certain organisms that have a penicillinase effect, which may necessitate the use of the sulfonamides, streptomycin, and more recently, bacitracin in the control of local infection. The local use of penicillin, streptomycin²⁹ and the sulfonamides has not been satisfactory. The newer antibiotics may offer much in the control of the local infection in a burn. The primary aim is to prevent the spread of infection by the administration of the antibiotics and sulfonamides. Innumerable chemical agents have been used locally to destroy the existing bacteria, none of which has been very satisfactory. Most of these agents produce more delay in wound healing than bactericidal effect. The use of furacin, 5-nitro-2-furaldehyde semicarbazone, in a water-soluble base, has proved to be beneficial in diminishing local infection. Some patients have a sensitivity to this drug, and it must be cautiously used. Since all burns are potentially infected, the fewer dressings and more careful precautions, the possibilities of infection are lessened. Tetanus antitoxin or toxoid must be administered in all burns.

The presence of a negative nitrogen balance and the obvious need of proteins for

tissue repair has made it necessary to give large amounts of protein for rapid healing. Protein in amounts up to 400 Gm. per day and sometimes five Gm. per kilo body weight has been recommended for some burns³⁰. Two to three times the normal daily caloric requirement is necessary to prevent serious weight loss. High amounts of carbohydrate up to 600 Gm. per day may be necessary to prevent the use of protein for energy metabolism.

There is an increased demand for ascorbic acid and riboflavin in the period of epithelization and formation of granulation tissue. Lund, et al³¹ suggest that one to two Gm. of ascorbic acid, and 10 to 20 mg. of nicotinic acid be given daily to severely burned patients.

To expedite the covering of large granulating surfaces, pyruvic acid in a starch paste at pH 1.9 as a chemical debridement³², or early surgical excision of necrotic slough, is helpful. Immediate excision and split thickness grafting of deep burns is recommended if the patient is in good physiologic balance³³.

Early grafting is essential to prevent subcutaneous scarring or contracture, which is always present when grafts are placed on thick granulating surfaces. All the measures previously mentioned, such as adequate control of shock, infection, fluid balance, anemia, and nutrition, are necessary prerequisites to successful grafting.

Clinical Investigation

This report consists of a study of all burned patients admitted to Grady and Emory University hospitals since 1946.

The per cent burn was estimated on all cases according to the method of Lund and Browder². The fluid intake, the output, laboratory findings, clinical condition of the patient, and therapy all have been recorded. Blood volume determinations were performed on 19 patients at crucial periods in

their course, using Evans blue dye (T-1824) and a Coleman Junior spectrophotometer. Particular emphasis was placed on a survey of each death with an attempt to determine its cause and if it could have been prevented.

A total of 105 patients is included. Forty-seven were colored, 58 were white, and there were 64 male and 41 female patients. Twenty deaths occurred, a mortality of 18 per cent. The per cent burn and the distribution of deaths are shown in the accompanying chart.

Per cent Burn	Total Burns	Deaths
0-9	24	0
10-19	42	2
20-29	15	1
30-39	8	2
40-49	2	2
50-59	4	4
60-69	1	1
70-79	3	2
80-89	1	1
90-100	5	5
		20 Total

It is noteworthy that only one patient with burns of over 40 per cent lived, and his burns were largely superficial. Of the 5 deaths occurring with burns of less than 40 per cent, 2 were intoxicated and did not present themselves for treatment until six hours post-burn, having been in shock most of the intervening time. Neither patient excreted more than 200 cc. of urine daily prior to death. One of them had terminal delirium tremens, and an autopsy performed on the other patient showed lower nephron nephrosis. Another was a known cardiac patient who suffered severe respiratory burns. A 90-year old woman died of congestive heart failure. The fifth patient died 13 days after injury without a proven cause of death. Nine patients died within 10 hours, 7 between the second and tenth day, and 4 after the tenth day. Six patients were severely burned, and death occurred before adequate therapy could be administered.

Twelve of the deaths are presented with a careful analysis of the clinical state, labora-

tory findings, and the causes of death. An attempt has been made to point out those factors which play a rôle in the morbidity and the mortality.

It appears that if a burn of less than 40 per cent is promptly treated and no complications develop, the chances of survival are good. Moreover, in burns of over 40 per cent, the prognosis is grave regardless of treatment.

Complications of the fatal burns were numerous, and follow for our series:

1. Congestive heart failure developing approximately one month after burn.....	1
2. Transfusion reaction	1
3. Probable previous kidney damage, uremia	1
4. Previous heart damage with pulmonary edema	3
5. Delirium tremens	1
6. Pyocyanous septicemia	1
7. Epilepsy	1
8. Shock (treatment delayed six hours)	2
9. Staphylococcal septicemia; multiple metastatic abscesses, nine months post-burn	1
10. Severe lung damage from smoke inhalation	1
11. Lower nephron nephrosis	1
	14

REPORT OF CASES

Case 1. E. L., white female, aged 37, 30 per cent body surface burned. This patient was admitted to the hospital one hour after receiving third degree burns of the face and mouth. There was evidence of respiratory involvement. Because of a history of hypertension and previous cardiac failure, she was given digitalis and placed in an oxygen tent. Blood volume two hours after burn was essentially normal; hematocrit reading was 45. The patient received 3,000 cc. of blood and 1,200 cc. of plasma in the two days following the burn. On the second day respiratory difficulty increased; vomiting became severe; and the urinary output became scanty containing hemoglobin and red cells. Hemoglobin was 23.5 Gm. per cent. The patient developed a cough productive of blood-tinged sputum, went into shock and died. Necropsy was not performed.

Case 2. O. L., Negro female, aged 70, 90 per cent body surface burned. One hour after her clothes caught fire, this patient was admitted to the hospital with acute pulmonary edema. She was given $\frac{1}{2}$ gr. morphine sulphate and intranasal oxygen. Plasma was administered intravenously. The patient did not respond favorably and shortly afterwards lapsed into unconsciousness with blood-tinged froth draining from her mouth. Death occurred three hours after the burn. Necropsy was not performed.

Case 3. J. P., white female, aged 10, 68 per cent body surface burned. This patient was admitted to the hospital in deep shock three hours after burn. Because of vascular collapse, three hours elapsed before intravenous fluid therapy was begun. She was given 1,350 cc. of blood and 1,000 cc. of plasma in the 35 hours before death. A transfusion reaction occurred two hours before death with temperature of 107.8° F. Vomiting began two hours after admission and continued until death, the last 500 cc. of vomitus being almost pure blood. Necropsy was not performed.

Case 4. E. C., white male, aged 32, 24 per cent body surface burned. This patient was burned while in-

toxicated, when his bedclothes caught fire. He was admitted to the hospital one-half hour later in apparently good condition and was given fluids intravenously. He had a history of peptic ulcer and was given a Sippy diet. On the second day he went into a shock, but was brought out of it four hours later with blood transfusions. He appeared highly nervous and agitated and was given paraldehyde. He became progressively disoriented and restless by the fourth day, and died with delirium tremens on the sixth day. Necropsy was not performed.

Case 5. A. K., Negro male, aged 26, 70 per cent body surface burned. This patient was admitted to the hospital one-half hour after his gasoline-soaked clothes became ignited. Shock was present, and the blood pressure was imperceptible. He was given 2,000 cc. of blood and 2,000 cc. of plasma within the first 24 hours. Blood volume determination on the second day showed a deficiency of 2,047 cc. of plasma and an excess of 797 cc. red cell mass. The hematocrit reading was 70. The patient never recovered from shock. On the fourth day he became disoriented, his temperature rose to 107° F., and he died. Necropsy was not performed.

Case 6. A. B., Negro male, aged 18, 56 per cent body surface burned. This patient was admitted to the hospital one-half hour after an explosion had ignited his clothes. Despite fluid therapy, the patient lapsed into shock 12 hours after admission. Blood volume studies showed a deficiency of 1,133 cc. and a red cell mass excess of 293 cc. Hematocrit reading was 58. On the sixth day, blood volume showed an excess of 403 cc. plasma and 330 cc. red cell mass, and the hematocrit reading was 45. The patient remained oriented and comfortable until the eighth day, when his abdomen became distended. Vomiting and hyper-ventilation then began, and he became disoriented. Intravenous fluid therapy, which had been stopped, was again started. However, his temperature rose to 107° F. and he died. Necropsy revealed marked infection of the surface burn. Cultures grew bacillus pyocyanous from the surface burns and from multiple internal organs.

Case 7. J. C., white male, aged 33, 50 per cent body surface burned. Patient was admitted to the hospital in a state of shock 16 hours after receiving burn. The temperature was subnormal. On the third day following admission, he became cyanotic and edematous and was disoriented and restless. Vomiting was prominent. Intravenous fluid (see chart 1) was stopped because of the edema. The temperature rose to 103° F. on the fourth day following admission. On the fifth day, patient became irrational and died.

Case 8. J. H. H., Negro male, aged 50, 42 per cent body surface burned. Patient was admitted to the hospital 45 minutes after receiving burn, and went into shock three hours after admission. Laboratory findings and therapeutic regimen are summarized in Chart 2. Evidences of sepsis were manifested on the third day following admission. On the eleventh hospital day, the patient became disoriented and delirious. Tremors developed on the sixteenth hospital day, and clinical uremia with uremic frost on the eighteenth day. The patient's temperature at this time was 106° F., and death occurred on the same day.

Case 9. B. R., white male, aged 15, 76 per cent body surface burned. This patient was seen approximately 10 hours after having received the burn. No therapy had been instituted up until this time. The patient received 2,000 cc. of plasma and was transported 50 miles to the hospital. Temperature on admission was 106° F. and the patient was having convulsions. Nausea and vomiting were present. Adrenal cortical extract and oxygen were administered. The patient remained in the hospital for a period of over eight months. During this time fluid balance was

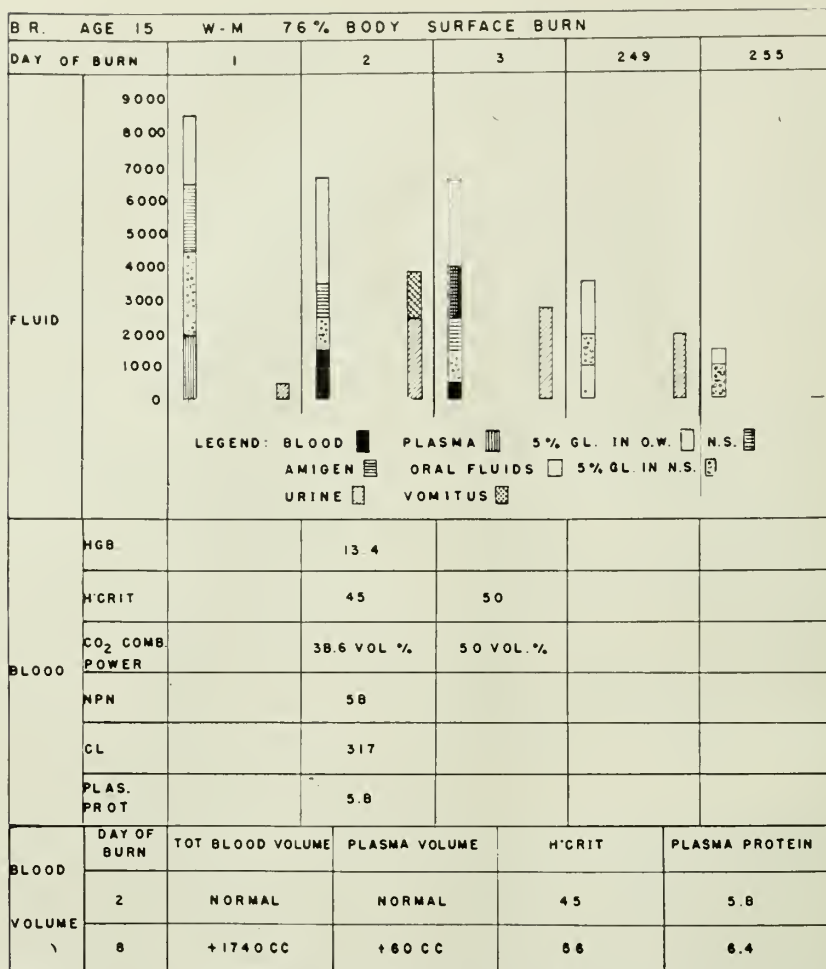


Figure 1: Chart demonstrating laboratory findings and therapy administered to lethal burn involving 76% body surface. Cause of death was brain abscess following staphylococcal septicemia.

maintained. Frequent blood transfusions were administered, and vitamins were given. On the 249th day the patient developed a headache, became drowsy, lethargic, and had projectile vomiting. There was moderate opisthotonos. Right frontal pressure by trephine was 350 mm. of water. A lumbar puncture was done, revealing a pressure of 530 mm. Spinal fluid had a ground-glass appearance with 500 polymorphonuclear leukocytes. On the 255th hospital day, the pulse became first irregular and slow. Death occurred on the same day.

Case 10. D. M., white male, aged 49, 46 per cent body surface burned. Patient was admitted to the hospital 30 minutes after receiving burn. He was in moderate shock and was irrational. The hematocrit at this time was 45. A blood volume determination was done five hours after admission, following administration of 500 cc. of blood and 900 cc. of plasma. The total blood volume was approximately 1,200 cc. below normal. The patient received 900 cc. of blood, 900 cc. of plasma, one liter of 5 per cent glucose in normal saline, and 700 cc. of oral bicarbonate in normal saline. During this period he excreted 200 cc. of urine and vomited 400 cc. Shock progressed, and the patient died 11 hours after the burn. Autopsy examination revealed dry subcutaneous tissues, minute myocardial hemorrhages, and cloudy swelling of the collecting tubules of the kidneys. There was no evidence of severe respiratory burn.

Case 11. J. T., white male, aged 38, 16 per cent body surface burned. This patient, a chronic alcoholic,

was admitted to hospital five and one-half hours after receiving burn, and was in severe shock on admission. Temperature at this time was 103° F. with a hemoglobin of 20 grams per cent. Urinalysis revealed a 2-plus albuminuria and 68 leukocytes. The patient received 2 cc. of mercurhydrin intravenously on admission. On the first hospital day, the patient received 900 cc. of blood, 1,000 cc. of normal saline, 2,500 cc. of 5 per cent glucose in distilled water and 300 cc. of plasma. Output consisted of 2,000 cc. of vomitus and 400 cc. of urine. On the second hospital day, the patient became anuric and edematous, and blood pressure could not be obtained. He was given pericortin and digitalis. A blood volume determination revealed that the patient's total blood volume was 1,000 cc. below his calculated normal. Plasma volume was 1,350 cc. below calculated normal. The hematocrit was 61, and the plasma proteins were 7.2 Gm. per cent. The hemoglobin was 18 grams per cent. Immediately prior to death, the patient became deeply cyanotic and had a temperature of 106.6° F. Autopsy examination revealed a lower nephron nephrosis, acute central necrosis of the liver, pulmonary embolism, and dehydration despite peripheral edema.

Case 12. M. F., white female, aged 90, 12 per cent body surface burned. Patient was admitted one-half hour after ignition of clothes by brush fire. She was apparently in good condition and never went into shock. The blood volume done was essentially normal, with a hematocrit of 42. Total intravenous medication consisted of 500 cc. of blood and 500 cc. of plasma on

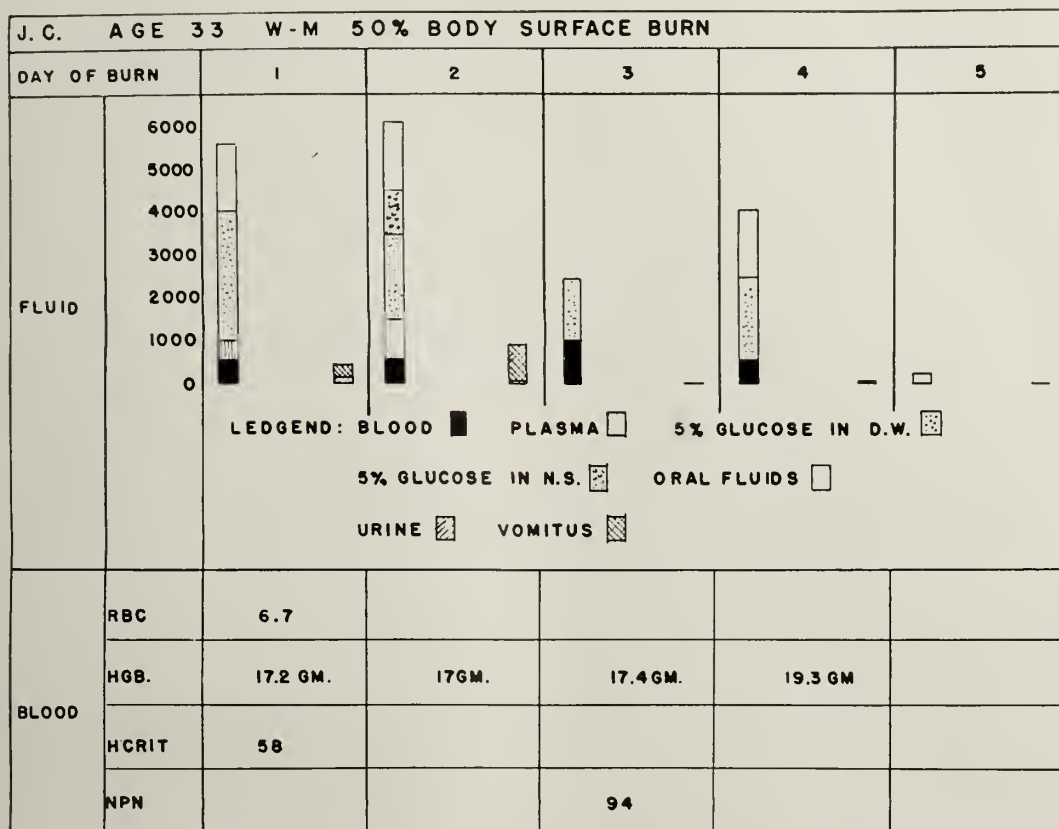


Figure II: Chart demonstrating laboratory findings and therapy on patient J. C. who had 50% body surface burn. It is noted that there was an increasing non-protein nitrogen on the third day with death on the fifth post-burn day. Cause of death, probable lower nephron nephrosis.

the first hospital day. Recovery was progressive and uncomplicated until 17th day post-burn, when dependent edema was noted. Patient was digitalized, with recovery from the edema. After a week, the symptoms recurred and she died two months post-burn of typical congestive heart failure, apparently unrelated to the burn. Autopsy was not performed.

Summary

1. A review of the pathologic findings of burns has been presented.

2. A critical study of 105 severely burned patients has been presented with the laboratory findings obtained, demonstrating the indications for fluid therapy and systemic care.

3. A mortality of 18 per cent was observed in this group. The type of patient seen was partially responsible for this high mortality. It was noted that most patients with as much as 40 per cent body burn failed to survive.

4. Attention should be directed to borderline cases which are considered insignificant. It is this group that can be saved

if early and adequate care is given.

5. It was concluded that in spite of recent advances, burns continue to be a large problem.

6. The outcome of all burns will depend on the enthusiasm and eagerness with which this problem is attacked.

7. Complications can be avoided during the first stage of a burn if estimations of the blood volume lost are known and sufficient replacement is made. Fluids should be administered in a manner depending on the needs of the individual patient rather than by set rules.

8. The use of chemotherapy and antibiotics has been made beneficial, but does not prevent the development of perhaps the most disabling complication of infection. Too great a stress cannot be placed on the fact that burns are essentially infected from the beginning and, in the light of the newer

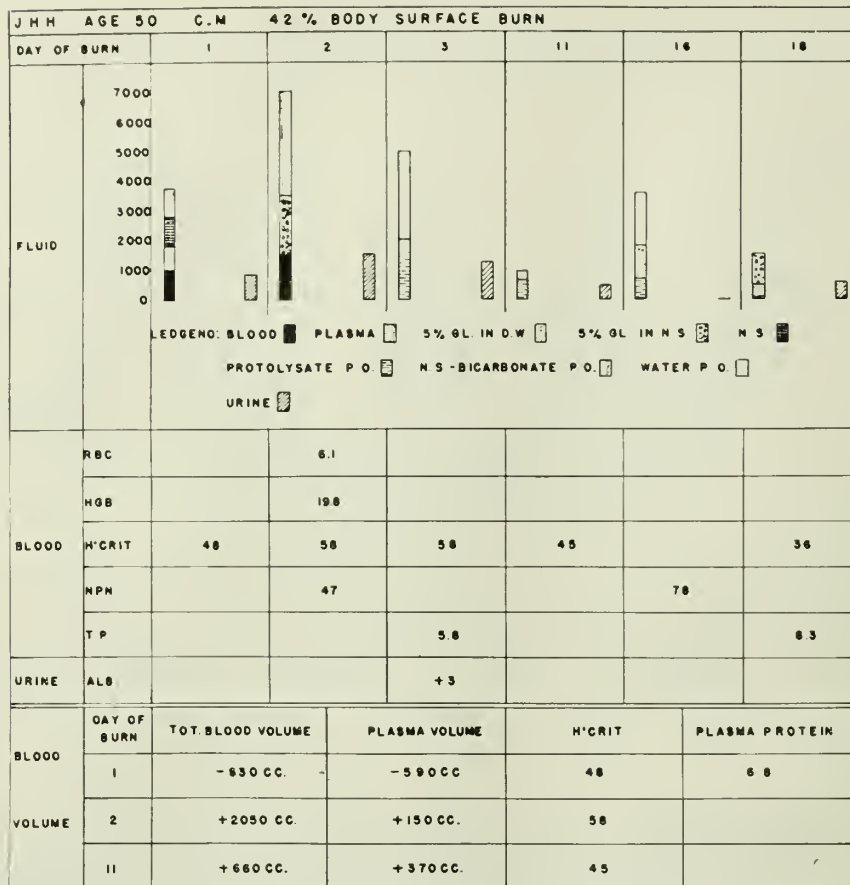


Figure III: Chart demonstrating laboratory findings and therapy on patient J. H. H. who had 42% body surface burn. Death occurred on the eighteenth post-burn day.

knowledge, this can be minimized to a great degree. The hospital stay will be shorter and the disability lessened.

9. Early skin grafting should be accomplished, which is made possible by the administration of sufficient blood before the patient develops the effects of sepsis.

BIBLIOGRAPHY

- Davidson, E. C.: Tannic Acid in Treatment of Burns, Surg., Gynec. & Obst. 41:202-221 (Aug.) 1925.
- Lund, C. C., and Browder, N. C.: Estimation of Areas of Burns. Surg., Gynec. & Obst. 79:352-358 (Oct.) 1944.
- Levenson, S. M.; Green, R. W., and Lund, C. C.: Outline for Treatment of Severe Burns. New England J. Med. 235:76-79 (July) 1946.
- Rosenthal, S. M., and Tabor, H.: Electrolyte Changes and Chemotherapy in Experimental Burn and Traumatic Shock and Hemorrhage. Arch. Surg. 51:244-252 (Nov.-Dec.) 1945.
- Tabor, H., and Rosenthal, S. M.: Experimental Chemotherapy of Burns and Shock; Effects of Potassium Administration of Sodium Loss, and Fluid Loss in Tourniquet Shock. Pub. Health Rep. 60:373-381, 1945.
- Fox, C. L., Jr., and Keston, A. S.: Mechanism of Shock from Burns and Trauma Traced with Radio-sodium. Surg., Gynec. & Obst. 80:561-567 (June) 1945.
- Moore, F. D.; Wendell, C.; Peacock, Elizabeth Blakeley, and Oliver, Cope: Anemia of Thermal Burns. Ann. Surg. 124:811-839 (Nov.) 1946.
- Friesen, S. R., and Wagensteen, O. H.: Experimental Burns Accompanied by Histamine Administration Abets Ulcer Diathesis. Proc. Soc. Exper. Biol. & Med. 63:245-248 (Nov.) 1946.
- Goodpastor, W. E.; Levenson, S. M.; Taghon, H. J.; Lund, C. C., and Taylor, F. H. L.: Clinical and Pathologic Study of Kidney in Patients with Thermal Burns. Surg., Gynec. & Obst. 82:652-670 (June) 1946.
- Seligman, A. M.; Frank, H. A., and Fine, J.: Traumatic Shock; Hemodynamic Effects of Alterations of Blood Viscosity in Normal Dogs and in Dogs in Shock. J. Clin. Investigation, 25:1-21 (Jan.) 1946.
- Noble, R. P., and Gregerson, M. I.: Blood Volume in Clinical Shock; Extent and Cause of Blood Volume Reduction in Traumatic, Hemorrhagic, and Burn Shock. J. Clin. Investigation, 25:172-183 (March) 1946.
- Evans, E. I.: Significance of Blood Volume Alterations in Surgical Patients. South. M. J. 38:214-221 (March) 1945.
- Lucke, B.: Lower Nephron Nephrosis (Renal Lesions of Crush Syndrome, of Burns, Transfusions, and Other Conditions Affecting Lower Segments of Nephrons). Mil. Surgeon 99:371-396 (Nov.) 1946.
- Walker, J., Jr.: Study of Azotemia Observed After Severe Burns. Surgery 19:825-844 (June) 1946.
- Abbott, W. E.: Metabolic Alterations Following Thermal Burns; Effect of Altering Nitrogen and Caloric Intake or of Administering Testosterone Propionate on Nitrogen Balance. Surgery 20:284-294, 1946.
- Levenson, S. M.; Davidson, Chas. S.; Lund, C. C., and Taylor, F. H. L.: Nutrition of Patients with Thermal Burns. Surg., Gynec. & Obst. 80:449-469 (May) 1945.
- Lyons, C.: Symposium on Management of Coconut Grove Fire Burns at the Massachusetts General Hospital; Problems of Infection and Chemotherapy. Ann. Surg. 117:894-902, 1943.
- Wells, D. B.; Humphrey, H. D., and Coll, J. J.: Relation of Tannic Acid to Liver Necrosis Occurring in Burns. New England J. Med. 226:629-635 (April) 1942.
- Mallory, T. B., and Brickley, W. J.: Symposium on Management of Coconut Grove Burns at Mass. Gen. Hosp.; Pathology, with Special Reference to Pulmonary Lesions. Ann. Surg. 117:865-884 (June) 1943.
- Cournand, A.; Noble, R. P.; Breed, E. S.; Lanson, H. D.; Baldwin, E. DeF.; Pemchat, G. B., and Richards, D. W., Jr.: Clinical Use of Concentrated Human Serum Albumin in Shock, and Comparison with Whole Blood and with Rapid Saline Infusion. J. Clin. Investigation 23:491-505, 1944.
- Moyer, C. A.; Collier, F. A.; Dale, Vivian; Vaughan, Herbert H., and Marty, Doris: Study of the Interrelationships of Salt Solutions, Serum and Defibrinated Blood in Treatment of Severely Scalded, Anesthetized Dogs. Ann. Surg. 120:367-376 (Sept.) 1944.
- Abbott, W. E.; Pilling, Matthew A.; Griffin, Grace

E.; Hirshfield, John W., and Meyer, Frieda L.: Metabolic Alterations Following Thermal Burns; Use of Whole Blood and Electrolyte Solution in Treatment of Burned Patients, *Ann. Surg.* 122:678-692, 1945.

23. Evans, E. I., and Bigger, I. A.: Rationale of Whole Blood Therapy in Severe Burns; Clinical Study, *Ann. Surg.* 122:693-705 (Oct.) 1945.

24. McDonald, J. J.; Cadman, E. F., and Scudder, J.: Importance of Whole Blood Transfusions in Management of Severe Burns, *Ann. Surg.* 124:332-353 (Aug.) 1946.

25. Abbott, W. E.; Meyer, Frieda L.; Hirshfield, John W., and Griffin, Grace: Metabolic Alterations Following Thermal Burns; Effect of Treatment with Whole Blood and Electrolyte Solution or with Plasma Following Experimental Burn. *Surgery* 17:794-804, 1945.

26. Wood, G. O., and Blalock, A.: Effects of Uncomplicated Hemoconcentration (Erythrocytosis) with Particular Reference to Shock, *Arch. Surg.* 42:1019-1025 (June) 1941.

27. Rosenthal, S. M.: Experimental Chemotherapy of Burns and Shock; Effects of Systemic Therapy on Early Mortality, *Pub. Health Rep.* 58:513-522 (March) 1943.

28. Harkins, H. N.; Cope, Oliver; Evans, Everett I.; Phillips, Lt. Com. R. A., and Richards, Dickinson, W., Jr., Fluid and Nutritional Therapy of Burns, *J. A. M. A.* 128:475-479 (June) 1945.

29. Howes, E. L.: Topical Use of Streptomycin in Wounds, *Am. J. Med.* 2:449-456 (May) 1947.

30. Co Tui, Wright; Arthur Mullin; Mulholland, J. H.; Barcham, I., and Breed, E. S.: Nutritional Care of Cases of Extensive Burns, *Ann. Surg.* 119:815-823 (June) 1944.

31. Lund, C. C.; Levenson, S. M.; Green, R. W.; Paige, R. W.; Robinson, P. E.; Adams, M. A.; MacDonald, A. H.; Taylor, F. H. L., and Johnson, R. E.: Ascorbic Acid, Thiamine, Riboflavin, and Nicotinic Acid in Relation to Acute Burns in Man, *Arch. Surg.* 55:557-583 (Nov.) 1947.

32. Connor, G. J., and Harvey, S. C.: Pyruvic Acid Method in Deep Clinical Burns, *Ann. Surg.* 124:799-810 (Nov.) 1946.

33. Cope, O.; Moore, Francis D.; Sweeny, Donald N., Jr.; Rawson, Rulon W., and Means, J. H.: Expeditious Care of Full-thickness Burn Wounds by Surgical Excision and Grafting, *Ann. Surg.* 125:1-22 (Jan.) 1947.

GOITER: HASHIMOTO TYPE

T. C. DAVISON, M.D.

A. H. LETTON, M.D.

Atlanta

We have been impressed in the last few years by an increase in the number of goiters we have operated on that are classified as Hashimoto's struma lymphomatosa. We wish to bring this, as well as several other of our observations about this disease, to your attention. Let us introduce our subject by briefly reviewing the standard classification of goiter (Table 1). The diffuse non-toxic goiters include adolescent goiter, the colloid goiter and thyroiditis. The diffuse toxic goiters are Grave's or Basedow's disease (the exophthalmic goiter), acute hyperthyroidism, (that is hyperthyroidism without exophthalmos) and thyroiditis. Under the nodular non-toxic goiters come the adenomas, the cystic disease of the thyroid, cancer of the thyroid and thyroiditis. Nodular toxic goiters include acute and

chronic hyperthyroidism and thyroiditis.

Chronic thyroiditis may come under either the heading of diffuse or nodular, non-toxic or toxic goiter. The fact that it is toxic is shown in two of our cases, in particular one of which had a B.M.R. of plus 44 and another plus 50. More commonly, however, chronic thyroiditis is classified under the diffuse non-toxic goiters, yet it may be nodular in that only a part of the gland is involved, or one part is involved more than another. Thus thyroiditis must be differentiated from all other types of goiters, and especially when only a portion of the gland is involved it must be differentiated from malignancy of the thyroid. This differentiation is sometimes extremely hard and usually must await microscopic examination of the tissue.

There are three types of chronic thyroiditis: the first being one following an acute inflammatory reaction; the second, the Eisenharte Struma of Riedel; and the third, Hashimoto's struma lymphomatosa. This paper primarily deals with the last of these and yet, as we have shown above, this type of goiter must be differentiated from all other goiters.

Riedel's struma is a replacement of thyroid epithelium by fibrous tissue which makes the gland quite hard. Riedel¹ originally described it as Eisenharte or iron hard struma. The most popular theory concerning the etiology of Riedel's struma at present was presented to the American Goiter Society last year by Dr. L. C. DeCourcy,² in which he believes that a perithyroiditis causes a chronic ischemia of the gland, which atrophies and is replaced by fibrous tissue.

In 1912 Hashimoto³ described struma lymphomatosa, which is an enlargement of the gland due to an infiltration by lymphoid and fibrous tissue. The first reported Hashimoto's disease in Georgia was a patient of

Read before the Medical Association of Georgia in annual session, Savannah, May 12, 1949.

one of us (T.C.D.¹) in 1935. Since then we have collected 27 other cases. Of these 28 cases 26 were seen after January, 1943, showing a marked increase in the incidence in the last five and one-half years. The incidence of Hashimoto's disease is usually reported as being one per cent or less.

In 1922 Ewing⁵ reported Hashimoto, and Riedel described, the early and late stages of the same process. This has brought on much controversy concerning the subject. In 1931 Graham and McCullough⁶ brought forth impressive evidence that they were separate entities, and this was backed up separately by serial biopsy of McClintock⁷ and Scarello.⁸ Time does not permit a full perusal of this controversy, except for us to say that from our own experience and review of the literature we feel that they are separate entities. Struma lymphotosa is not a respecter of geographical or social boundaries, but is very predominately found in the female. We have noticed only eight cases in the male reported in the literature while none of our own cases has been in the male. The average age given by various authors in the literature varies from 43.8⁹ to 57.6¹⁰ years. In our series the average age is 37.7 years. All but one of our patients had noted that they had a goiter for varying lengths of time, some even since girlhood. Without exception they had all been nervous and gave a history of some emotional unrest in the past. Seventeen complained of choking and 18 had palpitation of the heart. The B.M.R. ranged from minus 5 to plus 50. The average was plus 14½. It is well to note that a basal was not done on every patient, but in general only those who appeared toxic had B.M.R.'s run. The serum cholesterol varied from 125 to 250 milligrams per cent.

The gland was usually described as being diffusely enlarged, rather firm and had a pebbly feel. The upper poles of the gland

are usually a little broader and, as Cattell¹¹ described it, more like the gland of the exophthalmic goiter that has been treated with iodine. At operation the gland is usually uniformly involved, but in two instances in our series apparently only one lobe was involved. A biopsy of the other lobe was not taken. There were no adhesions between the gland and the surrounding tissue except to the trachea, and the blood supply to the gland was somewhat less than normal. The color of the cut surface of the gland varies, but is usually a lavender-tinted yellow. On clamping the gland the clamp usually tends to cut through, only clinging to blood vessels and strands of fibrous tissue. A small amount of clear fluid can usually be expressed from the gland. Microscopically there is an acidophilic degeneration of the thyroid epithelium with replacement by lymphocytes and fibrous tissue. The lymphoid tissue usually forms many lymph follicles.

Little is actually known of the etiology of Hashimoto's disease and to even list the theories concerning it would take much more than our allotted time this morning. We would, however, like to point out that the people in this series are a somewhat younger group of individuals than those reported in any other series that we have seen and that all but two have been encountered since 1943, which is two years after our entry into World War II. A large majority of these patients had husbands, sons or sweethearts in the service and were thus recipients of some anxiety in this regard. It has occurred to us that this constant anxiety and chronic emotional unrest may have resulted in chronic stimulation of the thyroid gland, resulting in an increase in all types of goiters as well as Hashimoto's disease.

We feel, at present, that the treatment of Hashimoto's disease is the surgical removal of at least a portion of the gland. If left

TABLE 1. CLASSIFICATION OF GOITER

DIFFUSE	{	NON-TOXIC	{	ADOLESCENT COLLOID THYROIDITIS
		TOXIC		EXOPHTHALMIC PRIMARY HYPERTHYROIDISM (THYROIDITIS)
NODULAR	{	NON-TOXIC	{	ADENOMA CYSTIC CANCER THYROIDITIS
		TOXIC		ACUTE HYPERTHYROIDISM CHRONIC HYPERTHYROIDISM (THYROIDITIS)

alone Hashimoto's disease gradually causes a constriction of the trachea, with increasing difficulty in breathing along with hypothyroidism and even a myxedema in some cases. In analyzing our results of our treatment of Hashimoto's disease, let us first define myxedema and hypothyroidism. To make the diagnosis of myxedema we feel that there must be a puffiness of the face, hands or eyelids and/or a significant gain in weight. The patient, of course, may also have swelling of the tongue and larynx, slowed speech, drying of the skin, fine hair, etc. The diagnosis of hypothyroidism, however, depends upon feeling tired, low blood pressure, noticing cold more than usual, a decrease in the metabolic rate or an increase in the cholesterol level. We have treated all of these patients with either subtotal or total thyroidectomies (Table 2). All 28 of our cases have been followed and 9 have developed myxedema (32.3 per cent). Of the 28 patients, 13 had total thyroidectomies and 8 of these developed myxedema (61.5 per cent), while of the 15 who underwent subtotal thyroidectomies only one developed myxedema (6.7 per cent). This is somewhat less incidence of myxedema than reported in the literature, and we are wondering if those authors were not using the terms myxedema and hypothyroidism synonymously. Twenty-five of the 28 cases devel-

oped hypothyroidism (89.3 per cent). The average postoperative metabolic rate, all performed at least six months after operation, was minus 6.6 per cent; the serum cholesterol was 252.8 mg. per cent. We have not given any of our patients irradiation as advocated by Renton¹² et al., who claim that they have one patient who shows no hypothyroidism after five years. You will note that we have two patients who at present are in the state of euthyroidism after total thyroidectomy and one after subtotal thyroidectomy. Others who agree with the x-ray treatment of Hashimoto's disease are Meaus,¹³ Schilling,¹⁴ and George Crile, Jr.¹⁵ On the other hand Boyden, Collier and Brugher,¹⁶ also Marshall, Meissner and Smith,¹⁷ don't use x-ray therapy, for in their opinion it may further decrease the amount of thyroid secretion. McSwain and Moore,¹⁸ however, state that x-ray does not cause hypothyroidism as badly as the operative procedures do.

In 1943 Polowe¹⁹ reported a case of Hashimoto's disease that had a B.M.R. of plus 43. Crane,²⁰ Polowe¹⁹ and Womack²¹ all have proposed that hyperthyroidism might be the first sign of Hashimoto's disease. In view of our younger individuals with their higher B.M.R. and with their microscopic pictures, we feel that we are dealing with several early cases of Hashi-

TABLE 2. SUMMARIZING THE AGE, PRE- AND POSTOPERATIVE STATE OF THYROIDISM AND TYPE OPERATION PERFORMED.

Patient	Age	Preoperative		Type Operation		Postoperative Follow-Up		B. M. R.	Chol.
		B. M. R.	Chol.	Subtotal	Total	Myxedema Yes No			
E. T.	32	22		*			*	+18	272
K. T.	14			*			*		245
P. L. B.	38	-1		*			*		
F. H.	33			*			*		247
J. H. M.	53			*			*		
J. S. J.	54				*		*	- 7	212
F. H.	54	-5	214	*			*		
W. E. F.	36	+44	125		*	*		-27	322
W. L. J.	29				*		*	-20	347
F. M.	43	+ 4	227		*	*		+20*	162*
G. R. F.	30			*			*	- 2	157
W. F. P.	45	+17			*	*			
R. S. K.	42		230	*			*	-10	222
J. M. K.	22				*	*			
P. H.	26				*	*		- 3	254
W. T. F.	27		250	*			*	-18	285
L. H. C.	48	+19		*		*			
M. J.	27	+16	207	*			*		270
L. E. W.	37		181	*			*		
T. W. M.	32	+ 9	180	*			*	- 9	176
E. B.	27	0	160		*	*		-11	380
A. B. C.	57	+50	153		*	*		+18*	300
J. L. C.	35	- 3		*			*		
M. R. ²	32				*		*		
C. B. ¹	62				*	*			
L. S. ⁴	50				*		*		
S. E. R. ³	31			*			*		
B. H. ¹	30				*		*		

*Taking thyroid extract

1. Patients Dr. W. A. Kelley

2. Patient Dr. B. L. Shackelford

3. Patient Dr. H. E. Steadman

4. Patient Dr. B. H. Clifton

moto's disease and are inclined to agree that probably in the early stages of Hashimoto's disease there is a slight hyperthyroidism, which later becomes euthyroid and then hypothyroid.

Summary

1. We have reported 28 additional cases of Hashimoto's disease, 26 of which have been seen since 1943, the first in 1935.

2. We have pointed out the younger age incidence in this group, the youngest being 14 years old.

3. We have pointed out the higher pre-operative basal metabolic rate. One patient was plus 44, another plus 50.

4. We have discussed the advisability of biopsy of these glands to rule out malignancy, as well as discussing the differential diagnosis from other types of chronic thyroiditis and other types of goiters.

5. Analysis of the results of the type of operative procedures used was made, and it was pointed out that following total thyroidectomy 61.5 per cent developed mild myxedema, while following subtotal thyroidectomy only 6.7 per cent developed any myxedema; 89.3 per cent of all the cases developed hypothyroidism.

6. Evidence that hyperthyroidism is one of the early signs of Hashimoto's disease has been presented. The theory that Hashimoto's disease may be the result of chronic emotional unrest has been advanced.

BIBLIOGRAPHY

1. Riedel, Bernhard: Ueber Verlauf und Ausgang der Strumitis Chronica. Munchen. Med. Wehnschr. 57:1946, 1910.
- Die Chronische, zur Bildung eisenharter Tumoren führende Entzündung der Schilddrüse, Verhand. d. deutsch. Gesellsch. f. Chir. 25:101, 1896.
- Vorstellung eines Kranken mit chronischer Strumitis, Verh. d. deutsch. Gesellsch. f. Chir. 26:127, 1897.
2. DeCourcy, L. C.: Etiological Factors in Riedel's Struma. Possible Roles of Perithyroiditis and Ischemia, Tr. Am. A. Study Goiter, 1948.
3. Hashimoto, H.: Zur Kenntnis der Lymphomatösen Veränderung der Schilddrüse (Struma Lymphomatosa) Arch. f. Klin. Chir. 97:219-248, 1912.

4. Poer, H.; Davison, T. C., and Bishop, E. L.: Struma Lymphomatosa (Hashimoto)—Report of a Case. *Am. J. Surg.* 32:172-175, 1936.
5. Ewing, J.: *Neoplastic Diseases: A Treatise on Tumors*, ed. 2, Philadelphia, W. B. Saunders Company, p. 961, 1922.
6. Graham, A., and McCullough, E. P.: Atrophy and Fibrosis Associated with Lymphoid Tissue in the Thyroid. *Arch. Surg.* 22:248, 1931.
7. McClintock, J. C., and Wright, A. W.: Riedel's Struma Lymphomatosa (Hashimoto)—A Comparative Study, *Ann. Surg.* 106:11-32, 1937.
8. Scarello, N. S., and Goodale, R. H.: Struma Lymphomatosa; Report of a Case Complicated by Myxedema, *New England J. M. ed.* 224:60-64 (Jan. 9) 1941.
9. Patterson, H., and Starkey, G.: The Clinical Aspects of Chronic Thyroiditis, *Ann. Surg.* 128: 756-769 (Oct.) 1948.
10. Joll, Cecil A.: The Pathology, Diagnosis and Treatment of Hashimoto's Disease (Struma Lymphomatosa) *Bri. J. S.* 27:351-389 (Oct.) 1939.
11. Cattell, (Quoted by Lahey, F. M.): Thyroiditis: Operative Procedure for Relief of Tracheal Constriction Due to Thyroiditis, *Surg., Gynec. & Obst.* 60:969, 1935.
12. Renton, J. N.; Charteris, A. R., and Heggie, J. F.: Riedel's Thyroiditis and its Treatment by Radium, *Brit. J. Surg.* 26:54-70, 1938.
13. Means, J. H.: *The Thyroid and Its Diseases*, Philadelphia, J. B. Lippincott Company, 1937.
14. Schilling, J. A.: Struma Lymphomatosa, Struma Fibrosa and Thyroiditis, *Surg., Gynec. & Obst.* 81:533-550 (Nov.) 1945.
15. Crile, George, Jr.: Thyroiditis, *Ann. Surg.* 127:640-654 (April) 1948.
16. Boyden, A. N.; Collier, F. A., and Bugher, J. C.: Riedel's Struma, *West. J. S. Surg.* 43:547-563, 1935.
17. Marshall, S. F.; Meissner, W. A., and Smith, D. C.: Chronic Thyroiditis, *New England J. Med.* 238:758-766 (May) 1948.
18. McSwain, B., and Moore, S. W.: Struma Lymphomatosa (Hashimoto's Disease) *Surg., Gynec. & Obst.* 76:562-567, 1943.
19. Polowe, David: Struma Lymphomatosa (Hashimoto) Associated with Hyperthyroidism, *Arch. Surg.* 29:768-777 (Nov.) 1934.
20. Crane, W.: Chronic Thyroiditis, California and West. *Med.* 35:443-446 (Dec.) 1931.

207 Doctors' Building,
478 Peachtree St., N. E.,
Atlanta.

DISCUSSIONS

Note: The papers referred to in the following discussions were published in two numbers of THE JOURNAL; namely, December, 1949 and January, 1950.—Ed.

Discussion of papers "Two Years' Experience in the Diagnosis of Uterine Cancer by Means of Vaginal Smears by Dr. H. C. Frech; "Tumors of the Salivary Glands," by Drs. J. Elliott Scarborough, Robert L. Brown and C. S. Jones; "The Borderline Diagnosis of Carcinoma of the Breast," by Dr. Hoke Wammock.

DR. H. E. NIEBURGS (Augusta): I would like to congratulate Dr. Frech on dealing so capably with the enormous task of examining over 3,000 slides on 1,200 cases in his office.

Over the past two and a half years we have completed a series of 10,000 cases of unselected patients, who were screened for uterine cancer. We found an incidence of about 1 per cent of pre-invasive cancer and 1.5 per cent of invasive cancer.

While I agree with Dr. Frech that this matter is an easy office procedure, I do not think that examination of the slides can be carried out in the physician's office. We found that the cells, particularly those shed from the cervix, appear in such a great variety that the interpretation of these cells and the differential diagnosis between invasive and pre-invasive cancer is very difficult and requires many years of intensive study on a large amount of material.

The reason why Dr. Papanicolaou has such a small percentage of false negatives is that he is grouping his slides into five classes: 1, negative; 2, atypical; 3, suggestive of cancer; 4, abnormal cells, probably cancer; 5, definite cancer. Group 3 he does not consider a positive class but an equivocal one. Therefore his percentage of error is very small. However, I under-

stand that 50 per cent of his Class 3 are negative.

In our analysis we have included our Class 3 as a positive class and call the negatives of Class 3 false positives. Our over-all percentage of accuracy is about 80 per cent. However, if we exclude Class 3, our accuracy reaches to about 98 per cent.

Discussion of papers, "Bleeding Duodenal Polyp: Report of Case," by Drs. McClaren Johnson and W. S. Dorough; "Congenital Intrinsic Duodenal Obstruction: Report of Eight Cases," by Drs. Lon Grove and Earl Rasmussen; "Transverse Abdominal Incisions," by Drs. Harry Rogers and William G. Whitaker; "Goiter: Hashimoto Type," by Drs. T. C. Davison and A. H. Letton, and "Treatment of Burns," by Drs. J. D. Martin, Jr., Richard S. Caudle, and J. M. B. Bloodworth, Jr.

DR. LESTER HARBIN (Rome): This series of papers has been so good that I am not sure I have very much to add. I think the essayists have covered the subjects exceedingly well, and we ought to commend them for the type of papers which have been presented.

I do want to make a few remarks about a couple of papers. I believe Dr. Grove and Dr. Rasmussen once again have presented a series of very unusual cases, and their surgical mortality of zero is indicative of the skillful manner in which they have handled these cases.

I can add very little to the discussion. I would like to emphasize the good results they have had, due to early accurate diagnoses and also to the detailed pre- and postoperative care which they have given those infants. I want to thank Dr. Grove and his associate for bringing these unusual cases to our attention, and we should look for them in the future.

Dr. Whitaker and Dr. Rogers have presented a large series of consecutive cases using transverse abdominal incisions, and I think the fact that they have used the transverse incision in all of these cases is the thing which makes their paper important.

I would like to ask Dr. Whitaker if he has ever regretted making a transverse incision and wished, after he had the transverse incision, that he had made a vertical incision. I know I have had that experience. I would like to know how he takes care of that situation.

Dr. Whitaker gave us a very mild impression about the incidence of postoperative hernia following transverse incision. I would be very much interested in knowing if he could elaborate on that a little more than he has.

The first paper, by Dr. Dorough, was very interesting, and I don't believe I can add anything to it.

I want to thank the essayists again for presenting such a nice series of papers.

Discussion of paper, "Goiter: Hashimoto Type," by Drs. T. C. Davison and A. H. Letton, Atlanta.

DR. C. H. RICHARDSON (Macon): Mr. Chairman, this discussion of Hashimoto's disease is more or less in the nature of a plea for an attempt to diagnose this condition before operation, because this condition is one of the things that contributes to the heartaches of many of us who are interested in thyroid surgery.

We believe that struma lymphomatosa is a chronic progressive degenerative disease of the thyroid which is characterized by degeneration of the glandular epithelium and replacement with lymphoid tissue and fibrous tissue.

Dr. Crile, of Cleveland, reports a series of 900 consecutive thyroidectomies, and just three cases of Hashimoto's disease. In a series of approximately 150 consecutive cases we have found, in the last two years, four cases of Hashimoto's disease, and I wish briefly to run over them with you:

The first was a patient 72 years of age. Her chief

complaint was extreme fatigue. The preoperative diagnosis was non-toxic, nodular goiter, and the basal metabolic rate was plus 4. Subtotal thyroidectomy was done, and the diagnosis was struma lymphomatosa. She made a satisfactory recovery but she still complains of extreme fatigue.

The second patient was Mrs. A. D., aged 51, whose chief complaint was muscular weakness and tightness in the throat. An examination showed a hard lump in the right lower lobe, and her b.m.r. was minus 2. The preoperative diagnosis was non-toxic adenoma, and she had a hemithyroidectomy. The pathological report was struma lymphomatosa. She has made a fairly satisfactory recovery.

Mrs. G. W., age 49, had a chief complaint of pain in her head. She had no energy and was tired all the time. Examination showed a hard nodular goiter, and the preoperative diagnosis was cancer of the thyroid, or Hashimoto's disease. Her b.m.r. was minus 4. We did a subtotal thyroidectomy, and she very promptly developed myxedema and was very much upset, and felt that she wished she had never had the operation.

The next case was Mrs. H. M., aged 41, whose chief complaint was a lump in the neck and fatigue. Examination showed a hard nodule in both lower lobes. Preoperative diagnosis was non-toxic nodular goiter. Her b.m.r. was plus 2. Subtotal thyroidectomy was done. The pathologic report was struma lymphomatosa. She developed myxedema and her fatigue continued.

The point I want to make particularly is that this is a progressive disease of the thyroid characterized by chronic constitutional disorders. These people not only have hypothyroidism but hypometabolism, and they keep on having it after they are operated on. I do not believe we cure them by operation. It is a question if some better form of treatment might be undertaken, particularly since there are very definite reports of improvement under x-ray therapy.

We feel that the important thing, and the thing we have not done and which we intend to do in the future, is to make some effort to evaluate and diagnose these cases in advance, particularly if they are hard or discrete or nodular types of growth which suggest cancer. This could very well be done and can be done by an aspiration biopsy with a liver needle.

This, I feel, is a thing that should be done, and if these patients do have struma lymphomatosa we had better think things over before we operate on them.

Discussion of paper, "Congenital Intrinsic Duodenal Obstruction: Report of Eight Cases," by Drs. Lon Grove and Earl Rasmussen, Atlanta.

DR. JULIAN K. QUATTLEBAUM (Savannah): Mr. Chairman and gentlemen: I would like to say, in discussing the paper presented by Dr. Rasmussen, that it has been my observation that pediatricians are never in any great hurry to have an infant operated on simply because he is vomiting. This is understandable, because the risk is necessarily high and also because many of these patients do get well on conservative treatment.

However, when an infant has a complete duodenal obstruction, operation of course, offers the only possible hope of survival, and it is interesting to note what happens to some of these patients years later.

I would like to illustrate this point by citing a case which I operated on July 10, 1935, fourteen years ago. The patient was then ten days old and weighed two and a half pounds, and was operated on without any hope of its survival.

At the operation, the duodenum was found to be completely atrophic in the third portion with an interval of some 25 mm. between it and the beginning of the jejunum. A simple anterior gastroenterostomy was done, anastomosing the beginning of the jejunum to the anterior wall of the stomach. The jejunum was

about the size of a good, healthy earthworm. As I say, no hope was entertained for the child's recovery. However, the child did recover, and it emphasizes the experience of every surgeon, that these little infants can stand a lot more than you think. That was fourteen years ago. I saw the child and had it completely examined last year. Although all of the duodenal fluid, bile and pancreatic secretions have to go retrograde through the duodenum into the stomach and out through the new opening, the child is apparently normal in every respect.

These are cases in which the duodenal obstruction is only partial, the child suffering from intermittent attacks of complete obstruction, which offer other problems. I recently saw a child three years old who had had such an experience and who had been through many bouts of acute high obstruction. Upon operation, the duodenum was obstructed at the duodenal-jejunal junction by failure of rotation at that point, and the chronically dilated duodenum was larger than the transverse colon.

I think it a mistake to make these children go so long without exploration, because modern therapy, antibiotics, plasma, blood, and so on, has reduced the operative risk sufficiently to justify the effort. Certainly, the outcome is better than letting them go on indefinitely.

I would also like to mention that everyone here must consider himself fortunate to have heard such a scholarly presentation on the subject of burns as that given by Dr. Martin.

Discussion of paper, "Congenital Intrinsic Duodenal Obstruction: Report of Eight Cases," by Drs. Lon Grove and Earl Rasmussen, Atlanta.

DR. THOMAS W. COLLIER (Brunswick): Mr. Chairman and gentlemen: I have greatly enjoyed the presentation of Drs. Rasmussen's and Grove's eight cases of congenital duodenal obstruction. The occurrence of duodenal obstruction or atresia is usually described in text books as a rarity, and left there. However, since Ernst's first successful operation in 1916, many cases have been observed, diagnosed and treated successfully.

Most of the reports are those acute, spectacular cases in which the obstruction is total and usually in full-term infants. Because of its supposed rarity, following a case of partial duodenal obstruction in Brunswick, a survey of the literature was made.

I found one case each was reported by nineteen men: Sumner, Peterson, Leitch, Dietch, Higgins, Farner, Cranmer, Peterson, Stewart, Seidlin, Regnier, Cutler, Stenson, Cole, Ernst, Porter, Reitscher, Jones, and O'Neal. Ward had a summary of fifteen additional cases, Forresner thirteen cases, and Ladd two reports of thirteen and nine each.

Our patient, H. M., was a premature, female child delivered by cesarean section on July 27, 1947, birth weight 5 pounds 2 ounces. She was seen on the thirteenth day of life, with history of projectile vomiting of large amounts occasionally during the twenty-four hours—not after each feeding. The vomitus did not contain bile. She was having one to four small, hard, yellow to dark stools daily.

Physical examination showed a tiny, emaciated, premature infant weighing about four pounds. There was no subcutaneous tissue, and her skin was in very poor condition. Peristaltic waves were visible over the upper abdomen. The liver and spleen were palpable and enlarged. There was no jaundice. The tongue and mouth were reddened and dry. No duodenal mass was palpable. There was a hemic murmur at the base of the heart.

Impression: Partial obstruction, either pyloric or duodenal. This was confirmed by x-ray.

Surgery was undertaken on the twenty-fifth day of life, August 21st, but on the table the child's condition became progressively worse and closure was

necessary after freeing adhesions about the duodenum and incising the pyloric sphincter. Dr. T. V. Willis did this surgery.

The postoperative course could only be described as saying she survived. The weight dropped to four pounds four ounces. In October it was evident that surgery must be undertaken again, in spite of the poor condition and tiny size. Therefore, on the eighty-first day of life (October 23rd), she went to surgery successfully, a posterior gastro-jejunostomy being performed by Drs. Jack Avera and T. V. Willis.

The next several weeks were marked by feeding problems, otitis media, and pneumonia. She survived and was dismissed weighing five pounds seven ounces on the 142nd day of life (December 16th).

We considered this four pound four ounce baby to be extremely small to undergo major surgery. However, Stenson likewise reports a twin who was successfully operated on with weight four pounds, and Stetner also reported a successful operation on a four pound two ounce baby.

Therefore, we wish to add the third four-pounder to successfully undergo major surgery for congenital duodenal obstruction.

DR. JACK C. NORRIS (Atlanta): Mr. Chairman, when one is invited to discuss three papers such as these this morning, it is a pretty big job, particularly after one has enjoyed Savannah's hospitality the night before. (Laughter.) The hospitality has remained consistent for about 200 years.

Dr. Frech's paper has emphasized an entirely new field in the diagnosis of malignancy. I happened to have the pleasure last October of hearing Dr. Papanicolaou read a paper on this technique. Although not the originator of it, he certainly has promoted it, and has called attention to its possibilities.

I was amazed when I saw the slides he showed, and then heard him say that his percentage of accuracy in diagnosis was between 99 and 100 per cent. I simply could not believe it. I think Dr. Papanicolaou is an honest man and a fine man, and I certainly believe he is a master pathologist, and he has been working on this problem for more than twenty-five years; but I have been doing some work for twenty-five years, too, and I don't believe there is such a thing as a 100 per cent method for diagnosing anything except death! Even then there is some doubt, because now they put the E.K.G. on one's heart and find that he died at ten o'clock, but the heart didn't quit beating until twelve! (Laughter.)

This Papanicolaou business leaves me rather disturbed when I study these smears, because sometimes they just knock you down, and you know very well you are dealing with a cancer—and another time you look at a slide and you don't know whether to tell the doctor "Yes" or "No". Then you go back to your old system of taking an autopsy—I mean a biopsy (Laughter).

I have recently had an experience with one of our leading surgeons in Atlanta, Dr. Gus Dorrough. Dr. Dorrough sent me a Papanicolaou smear of a young woman forty-one years of age, and I sent it back and said it was suspicious. You know what that means. (Laughter.) He got me another one, and I sent it back and said it was a little more suspicious. Finally Dr. Dorrough nipped off a little piece of tissue and I made a diagnosis of very early cancer.

He waited two weeks after he applied his magic treatment, which is the electrical apparatus, he came back and told me, "That was the most normal looking cervix I have ever seen." The lady, however, was in a bad fix. Her husband had recently died and she was in a nervous state. Dr. Dorrough had to do something for her.

On the basis of my slides he operated on this woman and removed her cervix, and lo and behold! when he cut the cervix open it was as normal as any you

ever saw; but they made serial sections, and a pathologist reported from another hospital that it was early intraepithelial cancer. We felt much better.

This brings up a question we can well wonder about: When do cells become cancer? Are we going to look at a few cells in an epithelial layer and call them intraepithelial cancers, when we can't see any cancer, when we can't feel any cancer, when everything looks to be normal?

The problem is going to evolve upon what we are going to call cancer. We have cancer cells, and we have cells that may look like cancer cells, but may not become cancer.

There are a lot of doctors around the country who are making routine Papanicolaou smears, turning them over to the technician, and telling the women they don't have cancer. I am very anxious to see where all this is going to lead.

The parotid tumors are most interesting. I have always considered parotid tumors to be very serious. From 25 to 50 per cent of them recur, in my experience, so I always warn a man, when he sends me a section of a parotid gland, "You must get them out thoroughly."

DR. J. K. QUATTLEBAUM (Savannah): Mr. Chairman, members and guests of the Medical Association of Georgia: Cancer in all its manifestations still continues to be the greatest single problem confronting scientific medicine today, and the results of treatment over the duration of my career as a doctor certainly do not lead me to see anything encouraging about this disease.

We have always harped on the fact that cancer must be treated early and discovered early, and we must get it early—yet we understand from Dr. Frech's paper that cancer in situ, theoretically at least, can be present for at least twelve years on the average before giving rise to symptoms. So what is early cancer?

It is encouraging to see that we are beginning now to look upon cancer as being early, not when we have a small growth or when the symptoms have been only noticed for a short duration of time, but rather in terms of pathological earliness or infancy. Certainly, the papers that have been presented by Dr. Frech and Dr. Wammock are encouraging in that it brings our attention to focus upon cancer in its very earliest pathological stage.

As Dr. Norris said, you can argue about it. There is an old saying that when pathologists agree, the patient dies. When they disagree, the patient survives.

I think we are justified through this technique of examining slides, as Dr. Frech has shown, in the office, and as Dr. Wammock has shown in early slides of the breast, in treating such lesions as early cancer, although unquestionably, a large number of operations will be done, you might say, unnecessarily. I have a feeling (theoretically, at least), and I want you to understand that I am not advocating this, that if every woman had a prophylactic complete hysterectomy on the day she became forty years old, performed by a capable surgeon, the number of cancer deaths prevented would justify the operative mortality.

Our attention must be directed toward cancer in its precancer stage, rather its doubtful stage. Even if we make mistakes, they are safer mistakes, and certainly, the uterus is a dispensable organ. I know of nothing more regrettable than the necessity of doing a radical mastectomy, on an attractive young woman. It is a mutilating operation, and I hope eventually some treatment will be developed that will make this procedure needless. But when you see the same young woman riddled with carcinoma, with the breast eventually coming off anyway—and, by the way, Sears-Roebuck puts out a pretty good rubber breast that looks very well under a dress—I still think the radical procedure is justified even in doubtful cases.

One point I should like to emphasize is this: Who is going to look at these slides? Certainly, I can't

tell anything about them. We have to place an unusual responsibility on the pathologist if he is going to say which is cancer and which is cancer's grandfather and which is not. So, it does leave us in a very puzzled position.

I, for one, believe that if we are going to err, we should err on the side of safety. It is better to operate unnecessarily early, than it is to operate very necessarily too late.

Concerning parotid tumors: I have had some experience with them, and I haven't seen the recurrences that have been mentioned, unless the tumor was ruptured in removing it. If a parotid tumor is enucleated intact and everything goes well, and if another tumor occurs seven years later, I hesitate to say it is a recurrence. It might be a new one, since we don't know what started it the first time. If the capsule is ruptured in getting out a parotid tumor, you should be on the alert for a recurrence, and I always treat such patients with x-ray after operation. If the tumor involves the submaxillary gland, I usually take out the gland entirely. We make every effort to preserve the mandibular branch of the facial nerve, and it usually can be done.

If the parotid gland is involved with carcinoma you can be sure of one thing—the facial nerve eventually will be paralyzed anyway, and you will have facial paralysis, so you might just as well go ahead and give the patient facial paralysis while he is living, because he isn't going to last very long, anyway.

I certainly have enjoyed the presentations.

DR. CATHARINE MACFARLANE (Philadelphia): Mr. Chairman, ladies and gentlemen: I appreciate this privilege. Unfortunately I missed the first two papers this morning, and therefore I cannot speak about them.

I should like to congratulate Dr. Wamrock on his most interesting and helpful presentation of the potentialities of soreness in the breast, which is something we have a tendency to overlook.

I should like to bring to your attention a matter which is not new, but which may be tremendously important, and that is the milk factor in the etiology of human cancer.

Dr. Bittner, first of the Bar Harbor Laboratory and now of Chicago, demonstrated beyond any possible question the transmissibility of cancer of the breast in mice by means of a virus which is termed "the milk factor". It is perfectly possible that this is also applicable to human beings, but this has not yet been demonstrated. The only way we can demonstrate it is from a clinical point of view, and if we make it our business to inquire into the history of our pregnant women, if there is a history of breast cancer in their background, that particular woman should not be permitted to nurse her offspring even for a few hours.

To dry up the milk, once upon a time, was somewhat of a procedure; but now the average woman does not nurse more than a few weeks, anyway, and the breasts in a woman with a cancer heredity could readily be dried up at once. It would be a very interesting clinical experiment if that were done on a large scale.

Thank you very much.

HEALTHGRAM

The incipient lesion of pulmonary tuberculosis of limited extent is practically always of unstable character and that in a large proportion of the cases it progresses to advanced and destructive disease. There is reason to believe that the majority of cases of manifest clinical tuberculosis have their origin in these seemingly inconspicuous, small lesions. David Reisner, M. D., Am. Rev. Tuberc., March, 1948.

ACUTE PANCREATITIS

WILLIAM G. WHITAKER, JR., M.D.

Atlanta

"Acute hemorrhagic pancreatitis is to be suspected when a previously healthy person, or a sufferer from occasional attacks of indigestion is suddenly seized with violet pain in the epigastrium followed by vomiting and collapse . . ."

In these words Fitz¹ (1889) first described this disease. Since that time numerous authors have added with great vividness to the clinical picture. Because of the dramatic and spectacular character of hemorrhagic necrosis of the pancreas, the more frequently occurring milder episodes of acute pancreatitis are often not considered in the differential diagnosis of abdominal pain. Elman^{2,3} called attention to a group of cases demonstrating some of the signs and symptoms of classical pancreatitis but of a subdued or lessened intensity. With the advent of accurate laboratory methods of diagnosis, edematous or interstitial pancreatitis has become accepted as a definite clinical entity.

It is the purpose of this paper to review several aspects of acute pancreatitis and to discuss the various factors concerned in its management.

For purposes of description pancreatitis may be divided into clinical groups,⁴ each group differing from the other principally in the extent of pancreatic involvement.

The classical portrait is that of the sudden occurrence of abdominal pain, vomiting and collapse. The onset of symptoms usually comes on a few hours following a rich meal and perhaps some alcohol intake. The pain is of violent nature, usually confined to the epigastrium but may radiate to the loins or back. Lord Moynihan's⁵ description is that of illimitable agony, the worst by far of all pain endured by the human

From the Department of Surgery, Emory University School of Medicine and the Surgical Services of the Grady Memorial Hospital, Atlanta.

body. Movement of the patient aggravates the pain and he lies motionless, afraid to make even the slightest move. Vomiting occurs early and may be projectile in character. Violent retching and persistent hiccough are common. Vascular collapse is often so marked as to suggest massive internal hemorrhage. Occasionally a peculiar patch cyanosis, slate gray in color is noted.

Examination of the abdomen reveals generalized tenderness and rigidity, both being more pronounced in the epigastrium. A definite fullness may be found in the upper abdomen often to the extent that the lower quadrants appear sunken. Peristalsis is usually absent.

Death may occur within 24 to 36 hours, but the surviving patient may enter a period of intractable vomiting, hiccough, chills, fever and sepsis. The process may culminate in the formation of a large cyst, or an abscess often associated with the signs of pancreatic insufficiency.

Another group may simulate closely the picture of acute coronary occlusion. Severe, crushing substernal pain may predominate and overshadow the abdominal component. Necropsy in such instances has revealed fat necrosis within the pericardium,⁴ presumably due to the presence of lipase in the blood stream.

A fair number of cases closely mimics acute cholecystitis. This group does not, as a rule, demonstrate massive pancreatic necrosis with its attendant shock. Jaundice is noted occasionally but is usually mild. The majority of these patients are operated upon for cholecystitis and the diagnosis of pancreatitis is made at operation.

Another group may present a striking similarity to acute intestinal obstruction. Profuse vomiting with abdominal pain and distention may lead to an erroneous diagnosis. A roentgenographic pattern of rather marked ileus may further suggest obstruc-

tion. Fitz¹ in his original description mentioned the significance of high intestinal obstruction in these cases.

A sizable number of patients are seen during acute alcoholism or just following an alcoholic debauch. This group has often been labeled acute alcoholic gastritis. It seems fairly certain that a considerable portion of this group are cases of acute pancreatitis.

Finally, some patients when first seen will have an epigastric mass and will volunteer a past history of recurrent episodes of pain and vomiting. This mass usually represents a large indurated pancreas, a pancreatic cyst or less frequently a pancreatic abscess.

Effects and Sequelae

Obviously those cases of massive hemorrhagic necrosis of the pancreas terminate fatally in a few hours or days. Mild cases of acute interstitial or edematous pancreatitis may undergo complete restitution to normalcy within a short period. Pancreatic pseudo-cysts are encountered with some degree of frequency. Biliary obstruction may be the result of edema and fibrosis in the head of the pancreas. Acute and chronic diabetes may be seen during and following an acute episode.

Chronic recurrence of abdominal pain may be noted following heavy meals or intake of alcohol. Roentgenograms in such cases frequently demonstrate calcification of pancreatic acini and the formation of duct calculi. Fibrosis and calcification may progress to the extent of producing pancreatic insufficiency with its characteristic boring pain and a sprue-like syndrome. Portal hypertension resulting from thrombosis of radicles of the portal system may follow a few cases of pancreatitis. Attention is usually directed to this condition by ascites or by bleeding esophageal varices. Finally, some cases result in extensive intra-

abdominal adhesions, fibrosis and calcification.

Etiology and Pathogenesis

In spite of extensive clinical and experimental efforts to establish the cause of acute pancreatitis, much remains to be known. Many investigators have accumulated considerable amounts of evidence to substantiate an idea or a theory but no one factor seems to be the explanation of all cases of pancreatitis. The causes are apparently varied and several factors may be able to produce the disease.

The trigger mechanism or the initiating agent is apparently one which will release trypsin or its precursor into the interstitial tissues of the pancreas¹⁰. It has long been observed that bile salts set up an intense inflammation when injected into the pancreatic duct. This is followed by edema, ductal occlusion, and in severe cases cellular destruction with liberation of pancreatic ferments. Bile may enter the duct of Wirsung when a common channel for bile and pancreatic juices exists. This anatomic arrangement has been observed in a considerable number of instances^{6 7 8 9 10}. Obstruction of the sphincter of Oddi by spasm^{7 9 10}, stone⁶ or edema¹⁰ would provide the necessary structural pattern for the retrograde flow of bile into the pancreas.

There is some evidence that intrapancreatic obstruction with increased intraductal pressure and rupture of the actively secreting acini is the factor in some cases^{11 12}.

Embolism, thrombosis, arterial rupture, metastatic infection and direct trauma may be responsible for the remaining cases¹⁰. The transition from pancreatic inflammation and edema to hemorrhagic necrosis has aroused much speculation. The erosion of blood vessels by trypsin has the backing of considerable experimental evidence¹¹. Intense local vasospasm with its resultant

ischemia and subsequent necrosis and hemorrhage is also based on some experimental evidence¹³.

Whatever the etiologic agents may be the pancreas is usually enlarged, varying in consistency from a stony hard organ to a soft fluctuant mass. The surface frequently shows whitish areas of fat necrosis. In more severe cases the gland may demonstrate extensive hemorrhage or gangrene. A characteristic serosanguineous or consommé type of intra-peritoneal exudate is often encountered. This fluid contains pancreatic enzymes and is responsible for the areas of fat necrosis found within the peritoneal cavity.

Laboratory Aids in Diagnosis

Elevation of serum amylase content is considered almost pathognomonic when associated with the clinical picture of acute pancreatitis. Those cases of rapid complete pancreatic necrosis may have only a negligible transient elevation of serum amylase followed in a few hours by subnormal readings. Amylase levels are usually increased within 24 to 36 hours of the onset of symptoms and may return to normal after 48 to 72 hours.

Urinary diastase is considerably increased after 24 hours and remains elevated for as long as four or five days.

Blood calcium levels are often lowered during the height of the disease. Ionizable calcium escapes from the blood stream to react with fatty acids liberated by pancreatic ferments. Tetany may be seen in the severe cases.

Blood sugar is at times elevated when the process is extensive enough to involve many islet cells. Glycosuria is more frequent than is generally suspected. Roentgenograms of the abdomen usually reveals a rather marked segmental ileus. The transverse colon is particularly dilated due to its proximity to the pancreas and the vulnerable

position of its mesentery.

Treatment

The relief of the intense pain of acute pancreatitis demands immediate attention. The use of morphine is questioned by several investigators in that it produces spasm of the sphincter of Oddi and may in some cases actually aggravate the condition⁸. For this reason demerol in adequate dosage is probably the treatment of choice; although this drug may also exert a mild spastic effect on the sphincter.

Complete gastro-intestinal rest utilizing a duodenal tube with constant suction is indicated for several reasons. Aspiration of swallowed air and the gastro-duodenal secretions provide prophylaxis against further abdominal distention. Hydrochloric acid is prevented from reaching the duodenal mucosa where it takes part in the production of an enzyme, secretin, which is a secretory stimulant to the pancreas. Moreover, hydrochloric acid in contact with the ampulla of Vater produces marked spasm of the sphincter mechanism⁸.

The regular use of vagus depressants such as atropine, promotes relaxation of the sphincter of Oddi, decreases the volume and acidity of the gastric secretions and serves well in relieving to some extent the epigastric pain.

Complete restoration of blood volume is essential. In the more severe cases large quantities of protein, water, salt and calcium may be rapidly lost from the circulating volume. These losses must be met early with adequate amounts of whole blood, plasma and crystalloid solutions. Blood transfusions are particularly indicated during the period of vascular collapse.

There seems to be a definite indication for splanchnic block in the treatment of acute pancreatitis^{4, 13}. Paravertebral procaine block of the 6th through the 12th thoracic ganglia often affords considerable re-

lief of pain. If the diagnosis of pancreatitis is made at operation the celiac ganglia may be injected while the peritoneal cavity is open. Theoretically at least, procaine block of the sympathetic nerve supply to the pancreas may in some cases alleviate vasospasm and in doing so may prevent the transition from the edematous pancreatitis to pancreatic necrosis.

The use of penicillin as prophylaxis against the occurrence of bacterial peritonitis is recommended.

The detection and treatment of diabetes and hypocalcemia requires repeated clinical and laboratory examinations.

There remains considerable controversy concerning the indications for surgery in acute pancreatitis. There are many surgeons who feel that all cases should be explored and drainage established. Cholecystotomy has long been advocated as emergency treatment. Certainly no surgical dictum can be established for all cases of pancreatitis, but there seems to be a recent trend toward conservatism or non-intervention. The establishment of a correct diagnosis is of paramount importance and all clinical and laboratory methods should be utilized. It is felt that surgical drainage per se has little to offer the patient and that the additional anesthetic and surgical load may be more than many of these severely ill patients can stand.

In the light of recent investigation it appears that surgery finds its most definite indications after the acute process has subsided, and in the treatment of the sequelae of this disease.

REFERENCES

1. Fitz, R. H.: *Acute Pancreatitis*, Boston M. & S. J. 70:181-187; 70:205-207; 70:229-233, 1889.
2. Elman, Robert: *Acute Pancreatitis*, Surg., Gynec. & Obst. 57:291-309, 1933.
3. Idem: *Surgical Aspects of Acute Pancreatitis*, J.A.M.A. 118:1265-1268, 1942.
4. Paxton, J R., and Payne, J. H.: *Acute Pancreatitis*, Surg. Gynec. & Obst. 86:69-75, 1948.
5. Moynihan, Sir Berkeley: *Acute Pancreatitis*, Ann. Surg. 81:132-142, 1925.
6. Opie, E. L.: *The Etiology of Acute Hemorrhagic Pancreatitis*, Bull. Johns Hopkins Hosp. 12:182, 1901.
7. Archibald, E.: *The Experimental Production of Pancreatitis in Animals as the Result of the Resistance of the Common Duct*, Surg., Gynec. & Obst. 28:529-545, 1919.
8. Doubilet, Henry, and Mulholland, John H.: *Recurrent*

Acute Pancreatitis; Observations on Etiology and Surgical Treatment, *Ann. Surg.* 128:609-636, 1948.

9. Doubilet, Henry, and Mulholland, John H.: The Surgical Treatment of Pancreatitis, *S. Clinic North America* 29:339-359, 1949.

10. Ravdin, I. S., and Johnston, C. G.: The Etiology and Pathogenesis of Acute Hemorrhagic Pancreatitis, *Am. J. M. Sc.* 205:277-301, 1943.

11. Rich, A. R., and Duff, G. L.: Experimental and Pathological Studies on the Pathogenesis of Acute Hemorrhagic Pancreatitis, *Bull. Johns Hopkins Hosp.* 58:212-259, 1936.

12. Popper, Hans L., and Necheles, H.: Edema of the Pancreas, *Surg., Gynec. & Obst.* 74:123-124, 1942.

13. Popper, Hans L., Necheles, H., and Russel, Kemper: Transition of Pancreatic Edema into Pancreatic Necrosis, *Surg., Gynec. & Obst.* 87:79-82, 1948.

RIGHT THORACIC APPROACH IN COMBINATION WITH LAPAROTOMY FOR RESECTION OF CANCER OF THE ESOPHAGUS AT THE LEVEL OF THE ARCH OF THE AORTA

RICHARD KING, M.D.

Atlanta

The real denouement in surgery of the esophagus occurred in 1938, when Adams and Phemister presented a case of resection of the lower third of the esophagus and cardia and reestablishment of continuity by esophagogastrostomy.¹ During the past six years the feasibility of esophagogastrostomy up to the apex of the thorax has been demonstrated numerous times.^{4 5 10} Recently esophagogastrostomy has been extended to the cervical region with success.^{2 6 9 11} In 1946, Ivor Lewis of London, reported the use of the right thoracic approach in combination with laparotomy in two stages to resect lesions in the middle third of the thoracic esophagus.⁷

This report is concerned with a right thoracic approach and laparotomy in one stage. No originality in technic is claimed.

REPORT OF CASE

R. H. S., aged 58, was admitted to Crawford W. Long Hospital May 10, 1949 with a chief complaint of difficulty in swallowing. The patient stated that he was in good health until ten months prior to admission when he developed a choking sensation in his manubrial region. He began having a feeling that food was sticking in his throat at the level of the suprasternal notch. The choking sensation persisted and swallowing gradually became more difficult. About five months ago he developed a dull aching pain subternally and posteriorly between his shoulder blades and this pain was present at all times. Also about this time he spit up a dark clot of blood, and about four hours later he awakened with a terrible pain

subternally, followed in about ten minutes with a hemorrhage of about a pint of blood. There was no hematemesis subsequent to this episode. One week later he consulted a physician near his home town and an esophagoscopy was advised. This was done and the biopsy proved to be benign. At first he began having trouble with solid foods and as his difficulty increased he began having trouble swallowing liquids. As a consequence, he lost his appetite and about fifteen pounds in weight. The patient became fatigued very easily.

Past history and family history were essentially negative. Physical examination: temperature 98.6 F., pulse rate 88, respiration 20, B.P. 150/90. The patient was well developed, fairly well nourished, middle-aged white male who was alert and cooperative. Head and neck: negative. Heart: negative. Lungs: negative. Abdomen: soft and no masses palpated. Rectal: prostate enlarged 1 plus, slightly boggy, symmetrical, and non-tender. Extremities: essentially negative. Diagnosis: carcinoma of the esophagus.

Laboratory work: WBC 7,600, polys 54 per cent, lymphs 46 per cent; RBC 3,450,000, Hg. 11.3 grams. Urinalysis: negative. Bleeding time: 3 3/4 minutes. Coagulation time 3 minutes. NPN 30 milligrams per cent. Electrocardiogram: normal.

Roentgenologic examination revealed a lesion at the level of the arch of the aorta. (Fig. 1).

On May 11, 1949 a bronchoscopy was performed under sodium pentothal anesthesia and this procedure was entirely negative. Then, with an 8-45 scope, an esophagoscopy was done. At the level of the arch of the aorta there was found a granulating mass partially surrounding the lumen of the esophagus which was definitely decreased in diameter. A biopsy was taken from the tumor and was sent to pathologic department for examination. The pathologic diagnosis was pre-invasive carcinoma of the esophagus. The patient was given 1000 cc. of blood. Due to the full operative schedule, the patient was discharged May 13, 1949, to re-enter May 17, 1949 for resection of the esophagus. On this admission the Hg. had increased to 12.7 grams. The patient was given another 500 cc. of blood and was operated upon May 20, 1949. On the morning of operation a Levin tube was inserted to the level of the suprasternal notch and the esophagus was cleansed. The Levin tube was left in place.

Technic: Under endotracheal cyclopropane-ether anesthesia, the patient was turned upon his left side and the right chest and abdomen were prepared and draped. An incision was made over the entire length of the right sixth rib which was removed from the neck of the rib to the costal cartilage. The pleural cavity was then opened. In order to obtain more exposure a small segment of the fifth rib was removed posteriorly and a rib spreader was inserted. The tumor was easily visualized and palpated and was located behind and above the azygos vein. The azygos vein was ligated and divided between ligatures. Then the whole mediastinal pleura was opened exposing the esophagus. The dissection was begun several centimeters below the tumor and after the esophagus had been freed at this point an umbilical tape was passed around it for traction. Then the tumor was gradually freed by blunt and sharp dissection and, although it was very close to the arch of the aorta, it was freed at this point without too much difficulty. There was only one node present and this later proved to be negative. The dissection of the esophagus then proceeded up to the thoracic inlet. Attention was then directed to the lower half of the esophagus which was freed of its attachments down to the diaphragm. While the right chest cavity was still open, the patient was slowly turned on his back and a left upper rectus incision was made and the abdominal cavity was opened. The stomach was exposed and there was no evidence of any nodes along the lesser



Fig. 1. Pre-operative x-ray film of carcinoma of the esophagus.

curvature or at any other point. Then the stomach was freed of all of its attachments from the junction with the esophagus down to the pylorus except the right gastroepiploic artery and the right gastric artery; however, the right gastric artery was ligated and divided after two branches entered the stomach wall. As I worked above through the chest incision and pulled gently, my assistant shoved the stomach through the hiatus which had not been enlarged. When it was determined that the fundus of the stomach reached or could be pulled to the apex of the chest with ease, the abdominal incision was closed in layers. It was unnecessary to mobilize the duodenum in order to obtain adequate length of the stomach. The patient was slowly turned on his left side again and his esophagus was divided between forceps at its junction with the stomach. The stomach was then closed with two layers of catgut and reinforced with several sutures of silk. The stomach was pulled up to the apex of the chest and was sutured laterally to the pleura so that it would remain in this position. The greater curvature of the stomach occupied the old bed of the esophagus and the lesser curvature was in a lateral position. An L-shaped anastomosis⁴ was performed between the stomach and the esophagus well above the lesion with a first layer of catgut and a second layer of interrupted silk sutures. Following this, the anterior stomach wall was lapped over the anastomosis and held in place by interrupted silk sutures. The Levin tube was inserted into the stomach at the time of the anastomosis. The right chest cavity was thoroughly irrigated with normal saline and a large catheter was placed in the posterior gutter and was brought out through the chest wall posterolaterally and connected to a water trap for drainage. The chest incision was closed in layers. The patient was given 3,000 cc. of blood while on the table and withstood the procedure quite well.

Pathologic diagnosis of the specimen was squamous



Fig. 2. X-ray film showing esophagogastrostomy in the apex of the right thorax.

cell carcinoma, Grade I.

The post-operative course was essentially uneventful. He was given one ounce of milk every two hours and the Levin tube was clamped fifteen minutes each time. Penicillin, streptomycin, vitamins, and an adequate amount of fluids were given. The Levin tube and a thoracotomy tube were removed on the fifth post-operative day. Now the patient was given liquids orally and his diet was gradually increased to a soft food on the eighth post-operative day. He was allowed a regular diet on the tenth post-operative day. Barium swallow on the day of discharge revealed there was no obstruction to the passage of barium through the anastomosis into the stomach and duodenum. (Fig. 2).

Follow-up: On July 8, 1949, seven weeks after operation, barium swallow was repeated and there was no evidence of obstruction at the site of anastomosis and no deformity of the gastric walls. The barium emptied slowly through the pyloric canal into the upper small bowel. The patient was feeling quite well on this date and his only complaint was occasional spitting up of food. This was solved by having the patient remain an upright position for a length of time after each meal. He returned to his work in September, four months after the operation, and has continued to work even though part time to date. The only discouraging feature has been a lack of weight gain. Physical examination in November, six months after the operation, was negative.

Discussion

The whole thoracic esophagus can be resected with less difficulty on the right side due to the fact that only one structure, the azygos vein, prevents complete exposure after the mediastinal pleura has been opened. When carcinoma of the esophagus

is located at the level of the arch of the aorta, it is far safer and easier to resect the lesion under direct vision than it is through a left approach where it is necessary to do some of the dissection blindly and for this reason it seems to be a better cancer operation. There are two variations from Lewis' technic: 1. The procedure was done in one stage. 2. The thorax was opened first to determine operability of the lesion. Resectability of the lesion is determined first in order to avoid an unnecessary laparotomy if the malignancy proves inoperable. For lesions of the lower third of the esophagus, the procedure has become very well standardized by resection through the left thorax. The only objection to the right approach using the technic described is in turning the patient twice on the table which may result in a fall in blood pressure. In the case described, there was a drop in blood pressure both times the patient was turned but the blood pressure returned to the original level shortly afterwards. The question of adequate blood supply to the stomach usually arises, and in this particular case the right gastroepiploic artery was left intact but the right gastric artery was ligated and divided after two branches entered the pyloric region of the stomach. A successful case has been reported in which both the right gastroepiploic and right gastric arteries were separated from the stomach down to the entrance of one branch to the pyloric end of the stomach.³ The right gastroepiploic or the right gastric artery should afford an adequate blood supply to the stomach but it seems unnecessary to divide both vessels down to the first branch in any case. The right crus of the diaphragm was not divided and although there was a snug fit, the stomach was not constricted by the crura.

Summary

A case of esophagogastric anastomosis in the apex of the right thorax using the right

thoracic approach and laparotomy in one stage for carcinoma at the level of the arch of the aorta has been presented.

REFERENCES

1. Adams, W. E., and Phemister, D. B.: Carcinoma of the Lower Thoracic Esophagus: Report of a Successful Resection and Esophagogastrostomy. *J. Thoracic Surg.*, 7:621, 1938.
2. Brewer, Lyman A.: One Stage Resection of Carcinoma of the Cervical Esophagus with Subpharyngeal Esophagogastrostomy. *Ann. Surg.* 130:8-20, 1949.
3. Clark, D. E.: Transthoracic Esophagogastrostomy for Carcinoma of the Middle and Lower Thirds of the Esophagus. *Ann. Surg.* 121:65-73 (Jan.) 1946.
4. DeBaakey, M. E., and Ochsner, A.: Subtotal Esophagectomy and Esophagogastrostomy for High Intrathoracic Esophageal Lesions. *Surgery*, 23:935-951 (June) 1948.
5. Garlock, J. H.: Reestablishment of Esophagogastric Continuity Following Resection of Esophagus for Carcinoma of Middle Third. *Surg., Gynec. & Obst.* 78:23, 1944.
6. Garlock, J. H.: Resection of the Thoracic Esophagus for Carcinoma Located Above the Arch of the Aorta. *Surgery* 24:1-8, 1948.
7. Lewis, Ivor: Surgical Treatment of Carcinoma of Esophagus with Special Reference to New Operation for Growths of Middle Third of Esophagus. *Brit. J. Surg.* 34:18-31 (July) 1946.
8. McManus, J. E.: Combined Left Abdominal and Right Thoracic Approach of Resection of Esophageal Neoplasms. *Surgery* 24:8-16 (July) 1948.
9. Nissen, R.: Cervical Esophagogastrostomy Following Resection of Supra-aortic Carcinoma of the Esophagus. *Ann. Surg.* 130:21.
10. Sweet, R. H.: Surgical Management of Carcinoma of the Midthoracic Esophagus. *New England J. Med.* 233:1-7, 1945.
11. Sweet, R. H.: Carcinoma of the Superior Mediastinal Segment of the Esophagus. *Surgery*, 24:929, 1948; *Ann. Surg.* 127:757-758 (April) 1948.

A.M.A. OFFERS HEALTH EDUCATION SERVICE TO SCHOOLS

The American Medical Association's Bureau of Health Education is cooperating with school health education programs on a national scale by issuing a monthly sheet of classroom discussion questions.

The sheet is to be used in connection with *Hygeia*, the health magazine of the A.M.A. Questions are limited to subjects of a scientific nature and are based on authoritative information contained in articles appearing in the magazine.

The questions cover a wide range of health topics, with emphasis on practical information which students can use for daily living, and are aimed at helping solve mental and emotional as well as physical health problems.

NEW YORK RANKS FIRST IN HOSPITAL FACILITIES FOR POLIO

The number of hospitals in the state of New York admitting poliomyelitis patients for treatment is nearly twice that in any other state, a nationwide survey of 6,276 American Medical Association registered hospitals shows.

The survey was completed by the A.M.A.'s Council on Medical Education and Hospitals at the request of the National Foundation for Infantile Paralysis, according to a report of the council in November 19 *Journal of the American Medical Association*.

Statistics for 1947 of the 1,243 hospitals which reported that polio patients are accepted for treatment reveal that 146 of these hospitals are in the state of New York.

Texas ranked second with 76 hospitals admitting polio patients for treatment, and Illinois third with 70 hospitals. Pennsylvania and California followed with 62 and 59, respectively.

On the basis of control, 181 of the 1,243 hospitals are listed as federal hospitals, 294 under state, city or county control, 688 as church or other non-profit associations, and 80 as proprietary hospitals.

The Medical Association of Georgia will hold its 1950 annual session in Macon, April 18-21.

PRESIDENT'S PAGE

PUBLIC RELATIONS: GOOD AND BAD

Three thousand, six hundred and sixty-six full-time press agents or public relations men are employed by the United States Government. According to a Bureau of the Budget estimate, the cost to the taxpayer for this large group of publicity agents is more than \$13,000,000 each year. Eighty-nine of these are employed by the Federal Security Agency. Although consideration of the activities of the Federal Security group is of the greatest interest to the medical profession, it is also important to consider the publicity program of the Federal Government as a whole.

No one can deny that the people of the United States should be informed about the activities and operations of the different departments of their National Government. No one can deny that this information can best be prepared and released by men well trained and skilled in publicity technics. No one doubts that a large number of these publicity agents are engaged in completely legitimate fields of endeavor. No one who has read releases from government agencies in the past year can fail to realize that at

least some of their efforts are intended to influence legislation or to boost administration officials. The purely political nature of some of the releases is so disgustingly clear it is apparent that these agents may be used in a manner dangerous to the freedom of the press and to the liberties of American citizens. There can be little doubt that Oscar Ewing has used press agents in the employ of the Federal Security Agency not only to promote compulsory health insurance but also to stimulate prejudices against the medical profession as a body, and also as individuals.

From your taxes paid to the Federal Government it can be assumed that a sum considerably in excess of \$25.00 a year is being used for purposes detrimental to your happiness and welfare.

It is very difficult to understand how any member of the medical profession who is opposed to the socialization of medicine can fail to assume his or her share of the necessary cost of the A.M.A. program.

ENOCH CALLAWAY, M.D.

THE JOURNAL

OF THE

MEDICAL ASSOCIATION OF GEORGIA

EDGAR D. SHANKS, M.D., Editor
478 Peachtree Street, N. E., Atlanta, Ga.

JANUARY, 1950

MEDICAL DUES, 1950

First, all dues—meaning your county society, state medical association and AMA—should be paid to the secretary of your county medical society.

If you do not know what your county dues are, then make inquiry of your local secretary. After having the information regarding county dues, add \$10 for the Medical Association of Georgia and \$25 for the American Medical Association.

Do you get the AMA journal with your annual dues? The answer is "no". You subscribe to *The Journal of the American Medical Association*, as usual, and the cost is \$12.

All dues should be paid promptly to the secretary of your county medical society.

A.M.A. MEMBERSHIP NOT COMPULSORY FOR ENROLLMENT IN LOCAL GROUPS

Dr. George F. Lull, Chicago, secretary of the American Medical Association, in a letter to secretaries of constituent state and territorial medical associations, emphasized that membership in the A.M.A. is not necessary for membership in component societies.

The explanatory letter was sent in connection with a notice to the state secretaries that the House of Delegates of the A.M.A. at its meeting in Washington, Dec. 8, had voted to establish dues of \$25 for 1950. The transmittal of the dues will be through the state organizations.

Members of the A.M.A. delinquent in dues payment for one year are subject to loss of membership. However, Dr. Lull in

his letter pointed out:

"Forfeiture of membership in the American Medical Association due to failure to pay dues will have no effect on membership in the component or constituent medical societies unless the component or constituent societies amend their respective constitutions and by-laws. It is, therefore, possible that a physician may be a member of his component and constituent societies and at the same time not a member of the American Medical Association."

Exempted from dues payment are retired members, those who are physically disabled, interns and those for whom the payment of dues would constitute a financial hardship. The decision will rest with the component societies.

WHOOPING COUGH YIELDS TO ANTIBIOTIC DRUG

Chloromycetin, an antibiotic drug, is a quick, easy, safe and exceedingly effective treatment for whooping cough, clinical study shows.

The drug was tested last fall in Bolivia during a severe epidemic of whooping cough which caused death rates twice as high as those in North America.

Dr. Eugene H. Payne, Detroit, of Parke, Davis and Company, the pharmaceutical house which developed the drug, and a group of Bolivian doctors report their findings in the current (Dec. 31) *Journal of the American Medical Association*.

The Bolivian doctors are Miguel Levy, Chief Medical Officer, Inter-American Corporate Service of Public Health; Gaston Moscoso Zamora; Moises Sejas Vilarroel and Eduardo Zabalaga Canelas, all of Cochabamba.

Seven children ranging in age from three months to eight years were treated with chloromycetin. All were clear of fever on the second day after the first dose of the drug was given, according to the doctors.

Coughing fits generally were greatly decreased on the second day, and in all seven patients disappeared on the fourth or fifth day.

"Since the supply of chloramphenicol (chloromycetin) was limited and there was such a large number of patients, only those who were seriously ill were treated with the drug," the doctors say.

"Chloramphenicol was given in varying doses depending on the weight of the child, and was administered by mouth in most cases. Untoward reactions to chloramphenicol appear to be negligible."

'TIRED FEELING' IS MAJOR AMERICAN DISEASE

Call it "that tired feeling," if you wish, but doctors have a lot of more complicated names—chronic nervous exhaustion, psychoneurosis, benign nervousness, functional disorder, anxiety state, neurasthenia, constitutional inadequacy and others.

It is a major American disease which affects perhaps one out of every two persons seen by doctors, according to a Stanford University physician.

"It is generally believed that from one third to two thirds of all patients who seek medical help have as the most significant cause of ill health an emotional or neurotic disturbance," Dr. Dwight L. Wilbur of Stanford University School of Medicine, San Francisco, writes in the December 24 *Journal of the American Medical Association*.

"This disturbance may manifest itself in a large variety of ways, but nervousness and fatigue are among the commonest symptoms."

Other symptoms are insomnia, irritability, inability to relax, fatigue in the morning, mental conflicts, difficulty in making decisions, and all sorts of aches and pains, particularly disorders of the heart and digestive system, he says.

The usual causes include an emotional problem or some situation in the victim's life, overwork with inadequate rest and relaxation, and inadequate recovery emotionally from an infection, according to Dr. Wilbur.

"There is not just a single level, but a wide range to the limits in structure and function of the normal person," he explains. "Acute fatigue or nervousness can be induced in any normal person by lack of sleep and sufficient threat to security; recovery generally is rapid with sleep or removal of the threat. When these symptoms are chronic the period of recovery will be longer, even after the cause is removed.

"Improving or relieving the patient's symptoms is an individual problem in each case. It cannot be accomplished until the patient understands the nature of his symptoms and accepts it reasonably well.

"If the cause of the symptoms is merely the stress of anxiety over a nonexistent organic disease or the result of overwork, relief usually can be obtained rapidly by simple reassurance or by adequate rest or a vacation.

"If, however, the distress is from a more complicated and less easily solved external cause, or if it deeply involves one of the major emotions, more detailed treatment and psychotherapy will be necessary."

ATTRIBUTE RELIEF FROM SHAKING PALSY TO PSYCHOTHERAPY

Panparnit, a relatively new synthetic drug, has not fulfilled expectations as a treatment for shak-

ing palsy, according to a group of doctors from Columbia University College of Physicians and Surgeons.

The drug, known as parpanit until recently, showed promise in early tests of becoming a superior treatment for the disease.

Favorable results in treating shaking palsy victims with panparnit seem to be produced to some extent by psychotherapy administered concurrently with the drug, the doctors say in the December 24 *Journal of the American Medical Association*.

The doctors—Daniel Sciarra, Sidney Carter and H. Houston Merritt—treated 43 patients for various neurologic conditions with panparnit.

Twenty-eight of the 43 had shaking palsy. In only one of the 28 could improvement be attributed to panparnit, the doctors say.

Of the entire group of 43, three showed some improvement. Thirty-seven had dizziness, nausea, vomiting, drowsiness, weakness, or other undesirable symptoms caused by the drug.

"It may be concluded that panparnit is not more effective than drugs previously in general use," the doctors point out.

"Favorable results obtained by other investigators probably were influenced by the intrinsic fluctuations of the patient with chronic disease and by the many psychotherapeutic factors that are inherent in the clinical investigation of any drug."

WORRY

Two psychiatrists of the University of California Medical School have been studying worry, "taking the emotion apart," to see what happens when people become anxious and how anxiety can be relieved.

Reporting in the November 1949 issue of *Archives of Neurology and Psychiatry*, published by the American Medical Association, Drs. Jurgen Ruesch and A. Rodney Prestwood of San Francisco give their conclusions.

When a person's body is stimulated to prepare for action, an unusual condition of blood vessels, muscles, and other parts occurs, the doctors say. As the body is persistently stimulated to prepare for action which cannot be made, the resulting effects are felt by the person as anxiety and tension.

Anxiety is contagious, the doctors found. No matter how much the worriers try to suppress and conceal their emotion, other people become infected from small indications, such as tone of voice and gestures, and start worrying, too.

Some people try to compensate for anxiety by overindulgence in eating, smoking, or drinking, the study shows. Others try to suppress their worry by making an effort to conceal it. Others try to establish a feeling of "belonging" by social contacts, ranging from conversation about the weather to group activities, such as those of

clubs.

Still others react by attempting to control the actions of friends and acquaintances, to dictate to them.

None of these are mature or effective reactions, the psychiatrists found.

Successful management of anxiety generated in daily life seems possible only through discussing and sharing the problem or situation with other persons, the psychiatrists say.

"The successful management of anxiety generated in daily life seems possible only through the process of sharing and communication," the article points out.

"The process of communication is essential for healthy functioning so that people may combine efforts to cooperate, complement, and increase their ability to cope with surroundings.

"Alleviation of anxiety through personal contact is the process which is basic to all interpersonal relations from babyhood to old age.

"The ability to communicate and hence to share anxiety seems to constitute that process responsible for feelings of personal security of the individual."

The study was supported by a grant from the U. S. Public Health Service, Division of Mental Hygiene.

NAME OF *HYGEIA*, HEALTH MAGAZINE, TO BE CHANGED TO TODAY'S HEALTH

A change in name to Today's Health, effective with the March 1950 issue, is announced in the current (January) *Hygeia*, health magazine of the American Medical Association.

The masthead of the January number also carries for the first time the name of Dr. W. W. Bauer, Chicago, as editor, succeeding Dr. Morris Fishbein, Chicago. Dr. William Bolton, Chicago, is the new associate editor, succeeding Dr. Bauer. Ellwood Douglass will continue as managing editor.

Hygeia was established by the American Medical Association in 1923. Written for the layman, it has come to be one of the most widely quoted health education periodicals in the United States. There will be no change in fundamental policy under the new editorship or new name.

Dr. Bauer received his M.D. degree from the University of Pennsylvania in 1917. He served as a Captain in the Army Medical Corps in World War I. After two years of service in the Milwaukee Health Department he became health commissioner of Racine, Wis., in 1923, serving until 1931.

He joined the American Medical Association headquarters staff in 1932 as director of the Bureau of Health Education.

ARE WE NEGLECTING SKIN TUMORS?

It would appear to some of us that we encounter numerous people, many of whom are patients,

who have skin tumors: hemangiomas, verrucae, nevi, melanomas, small basal cell lesions, who are unconcerned about them. This fact would seem at first hand to be not unusual because all of us have become more or less used to such a state of affairs. The thought arises, however, that we might be guilty of neglect. Perhaps such growths might be referred to as ones of minor significance which do not demand much attention from the busy doctor. We might further agree that most of these growths are relatively harmless. But only a few days ago I saw one of the supposed "harmless types" which will ultimately destroy the patient's life!

The management of skin tumors, therefore, suddenly becomes one of considerable significance, especially when one must die. Most skin tumors, as we have said before, are minor lesions, often obscured or hidden in some skin recess of the body. They are frequently covered up by the patient on account of vanity, and are seldom painful unless irritated, infected or traumatized. We must reiterate that most of those we see probably will never give rise to serious difficulty, but there is no question about their neglect. Almost every week we see people with moles, hemangiomas, and basal cell tumors who say that some person had advised them to "let them alone". Such advice is not in accord with the modern concept about cancer elimination or control. It is dangerous advice to give! Every doctor has seen the most innocent appearing skin tumor revert to metastatic cancer and create impossible problems by invading local tissues, ending with prolonged disability and death of the victim.

I have frequently asked myself why this state of neglect exists. Apparently the answer is simple. The patients are not urged and informed enough to take action. Doctors are hesitant to insist that some small mole be removed. It is often such a small matter. It is also troublesome to fix up a small surgical tray with its necessary accoutrements to remove these growths. The family physician seems to forget that there are at least a dozen or more dermatologists within whistling distance of his office who are all very skillful at removing skin tumors. On the other hand physicians may think these people should be sent to the hospital for such surgery, and here we reach a problem in which a small matter becomes a large one. No one likes to go to a hospital and pay \$5.00 for a room and \$10.00 for operating room service. The doctor bill added and the pathologic report all sum up to about \$40.00. Otherwise a small dressing tray, a few sterile instruments, a bit of novocaine or a cautery in the hands of a physician with *experience in minor surgery*, and a good clean sanitary office are all one needs to take any skin lesion off which measures 2.5 x 1.5 cm. or thereabouts. If there should appear to be deep fixation to subcutaneous areas, or should one find nodes nearby, then the

problem becomes one for the general surgeon, and the hospital is the better place for its removal.

One must be brave when he encourages "office surgery" and must be prepared to bare his chest to the cold wave of criticism. We have developed and are continuing to produce a group of doctors who conscientiously feel that the hospital is the only place for surgery of any type. One would hesitate to take issue with their conception of surgical responsibility, yet the patient must pay the bill and until hospitals are subsidized, then doctors must help eliminate the high cost of medical care by doing the best they can under the circumstances; and I still think most small solitary skin tumors can be removed in the office.

Now let us turn to other generalities. Such tumors, in contrast to what has been said, are being studied by pathologists more than ever before in order to understand the general character and cell derivation of many of them. Effort is being continually made to develop better stains for the cells, with the hope in mind that someone can unravel some of the mysteries of cellular potentials so that some knowledge might be gained as to why some tumors are very malignant and others entirely benign. Why does one rapidly metastasize while a similar one does not? We also need to know more about how and why malignancies metastasize. We know that some spread by the blood stream, others by the lymphatics, while still others spread by continuity of tissue. It is also felt that malignant cells are transported by phagocytes. When these mysteries are clearly unfolded, then prevention and destruction will be enhanced, to some extent anyway.

To emphasize the common occurrence of skin tumors, and to further call attention to their importance, we recently reviewed our own material, and were amazed to find that out of a total of 192 tumors of all varieties encountered in 12 months, 42 or more were skin types, such as epitheliomas, hemangiomas, melanomas and metastatic varieties. In several instances we could not clearly classify them. We do not know how many have invaded other organs.

The management of skin tumors will be briefly touched upon here. It would seem that the consensus of opinion is that surgical removal is the best approach and wide and deep incision is best. Irradiation and local cautery will destroy epitheliomas of a superficial character, often graded as grade 1; however, Cogniaux of the Belgian Society of Surgery states that 8 per cent of those tumors are fatal. In tumors that have infiltrated, or those that have received radiation and relapsed, the mortality is about 60 per cent. Those growths which appear refractory to radiation must be treated surgically. Electrosurgery with electrocoagulation seems to be a highly recommended surgical procedure. Nevocarcinomas and sarcomas should always be surgically evicted.

Surgery and radiation combined also make a fine therapeutic combination provided of course that metastasis has not occurred.

One of the most common skin tumors is the wart or verruca, which is very frequently encountered on the plantar surfaces. These lesions give one a miserable existence at times. They too can be managed. Carbon dioxide snow is curative, but one should know the technic of its application. All dermatologists are acquainted with it. Silver nitrate applied by pressure for 15 minutes—five or ten weekly treatments—will suffice. Podophyllin has also been tried with good effect. Results are also obtained with trichloroacetic acid applications. Electrosurgical removal will delete them nicely and cure 75-90 per cent of the warts. Roentgen therapy is an old stand-by in expert hands. Suffice to say, then, that there is little reason why anyone should suffer with verrucae, and a harmless verruca is one that has been removed thoroughly.

Therefore, the general idea in mind is to urge that we give more and more attention to skin lesions. Let us resolve not to be too busy to remove those tumors with the thought in mind that every one we leave can be a dangerous source of cancer. We should also resolve not to depend upon your clinical judgment as to what constituted a benign skin lesion or a malignant one, for by following this procedure we are treading on thin ice. *Every skin tumor* should be subjected to histologic evaluation regardless of one's clinical or gross impression, and we are certain that when they are pathologically reviewed many will be surprised to find that what they had thought was innocent was actually malignant.

All that we here say and here recommend is in line with all that is promoted in the field of cancer control and prevention. One of the best ways to control cancer and to cure cancer is to unhesitatingly go after every suspicious lesion with every possible aid at our command. A cancerous area thoroughly removed is the only dead cancer that we know!

JACK NORRIS, M.D.

PORTRAIT OF DR. FISCHER UNVEILED AT THE CRAWFORD LONG HOSPITAL

On November 27, 1949 an oil portrait of Dr. Luther C. Fischer was unveiled at the Crawford W. Long Memorial Hospital, the gift of the medical staff and nurses of the hospital, and the administrative personnel. The very fine likeness of Dr. Fischer, three-quarters length, was painted by the Atlanta artist, Milner Benedict, who has made good portraits of several prominent Atlantians.

The presentation was made by Dr. Edgar H. Greene for the medical staff and Mrs. Macie Stephens for the nurses. Dr. Wadley Glenn accepted the portrait on behalf of the hospital. The unveiling was done by Miss Frances Glenn, daughter of Dr. and Mrs. Wadley Glenn, and Miss Laura Hill Boland, daughter of Dr. and Mrs. Joseph Boland. Dr. Frank Boland presided. Tea was served to the 300 guests present. The portrait will be hung in the fountain room of the hospital.

FRANK K. BOLAND, M.D.

GEORGIA DEPARTMENT OF PUBLIC HEALTH

THE PREVENTION OF CONGENITAL SYPHILIS

RUDOLPH W. JONES, JR., M.D.
Atlanta

Despite the widespread use of penicillin in the treatment of syphilis in pregnancy, a substantial number of children with congenital syphilis are born each year in Georgia. During the past two and one-half years, 1,843 new cases of congenital syphilis were discovered in this State.¹ The number of children in this group less than one year ago has decreased from 17 per cent in 1947 to approximately 8 per cent in 1949. Although the incidence of children born with congenital syphilis will probably continue to fall, the persistence of a significant number of children born each year with this infection necessitates a consideration of present day methods of prevention, diagnosis and treatment.

Relation of Outcome of Pregnancy to the Duration of Syphilis in the Mother. The duration of the maternal syphilitic infection has an appreciable influence on the transmission of the disease during pregnancy. Although women with syphilis of ten to fifteen years' duration have been known to deliver syphilitic infants, the incidence of fetal infection is greatest among patients with early syphilis. Ninety-five per cent of the women who delivered syphilitic infants in this hospital were found to have had their infection less than five years. Since untreated primary or secondary syphilis during pregnancy nearly always results in infected infants, these women should be treated promptly and adequately.

Essentials of Prenatal Care in the Prevention of Congenital Syphilis. The necessity for serologic tests early in pregnancy has been firmly established. Syphilis is often acquired, however, during the late stages of pregnancy, at which time the primary and secondary manifestations of the disease are frequently suppressed. In order to detect the infection in these patients, repeated serologic tests should be taken during the last trimester of pregnancy and at the time of delivery. This is particularly important among groups of patients having a high incidence of the disease.

The need for repeating the serologic test in the last months of pregnancy is demonstrated by the following case history:

A three-month-old white male infant was referred to us in March 1949 with the diagnosis

of congenital syphilis. The infant showed a diffuse skin rash, snuffles, roentgenographic evidence of osseous syphilis and a high titer Kahn reaction. Questioning of the 17-year-old mother revealed that she apparently had a negative serologic test for syphilis during the first trimester of pregnancy. No serologic tests were taken later in pregnancy or at the time of delivery. The father had developed a penile lesion in 1947 prior to marriage and had received two injections, presumably of penicillin, with rapid healing of the lesion. He was never informed that he had syphilis and no serologic tests were taken. Shortly after his marriage he developed a recurrent penile lesion, which again healed following a single injection of penicillin. At the time the infant was found to have syphilis, examination of the parents revealed early latent infection in the mother and a recurrent secondary lesion, containing *T. pallidum*, in the father. The father apparently had had early syphilis, which had been inadequately treated on two occasions and had recurred, infecting his wife late in her pregnancy.

From this history it is evident that a single serologic test for syphilis early in pregnancy is not always adequate in preventing congenital syphilis. Unfortunately, many patients do not have even a single test during gestation, despite a law in Georgia requiring that a serologic test for syphilis be taken in every pregnant woman. This is partly due to oversight on the part of physicians and also to the fact that many of the patients are cared for and delivered by midwives.

Relation of Therapy to Outcome of Syphilis in Pregnancy. Penicillin has now become the treatment of choice for syphilis during pregnancy and has supplanted almost entirely the use of arsenical therapy. Penicillin has the advantage in that one course of treatment not only protects the fetus, but also constitutes complete treatment for the mother. It is also of value when administered in the late periods of gestation. The minimal effective total dosage of penicillin in the treatment of syphilis in pregnancy has been found to be 2,400,000 units given in a period of not less than seven days.² Most authorities, however, now recommend at least 4,800,000 units administered over a 10-day period. This may be given in either aqueous solution of crystalline penicillin in equally divided doses every three hours, or by injection of 600,000 units of procaine penicillin daily or three times a week. Following penicillin therapy, these patients should be observed very closely and serologic tests should be taken every month. If there is a definite rise in serologic titer or if clinical evi-

From the Clinic for Genitoinfectious Diseases, Grady Memorial Hospital, Emory University School of Medicine, and the Georgia Department of Public Health.

dence of syphilis re-appears, retreatment is indicated.

Should Every Pregnant Woman with History of Previous Treatment for Syphilis be Retreated? Conservative opinion holds that all women with syphilis should be retreated during each pregnancy. Several investigators, however, have shown that retreatment can be safely withheld during pregnancy in patients who have had previous therapy. The decision as to which patients need not be retreated is often difficult. The height of the serologic titer cannot be depended upon entirely to determine the activity of the infection, since a high titer may occur in patients having seroresistance, while a recent or active infection is not excluded by a low titer.

Therapy during pregnancy can be omitted only in those patients in whom careful evaluation indicates inactivity of the syphilitic infection. Since frequent clinical observations and quantitative serologic tests for syphilis to determine the activity of the infection are not always possible, it is probably best to retreat all syphilitic women having positive serologic reactions during pregnancy.

Recognition of Infantile Congenital Syphilis. Since all pregnant women with syphilis may deliver syphilitic children, careful observation of the newborn infant should be made for at least six months. Infants with syphilis may not exhibit obvious manifestations of the disease and may even show a negative serologic test in the neonatal period. Conversely, infants with positive serologic tests may not have a syphilitic infection, since reacting substances (reagin) may be carried over from the maternal circulation to the child. Ingraham³ reported that 40 per cent of a group of nonsyphilitic infants had positive serologic tests at birth, while only 7 per cent of those with a positive serologic reaction had syphilis. Thus, the recognition of congenital syphilis in the newborn may be difficult. Frequent clinical observations, repeated serologic tests for syphilis, and roentgenographic examination of the long bones are all necessary for early detection of the disease in the neonatal period. Practically all cases of congenital syphilis will be diagnosed if observation is made for three to six months. The diagnosis of congenital syphilis depends upon the demonstration of (1) typical manifestations, such as skin lesions, anal condyloma, snuffles, or pseudoparalysis; (2) serologic tests for syphilis with a high titer or rising titer; and (3) roentgenographic evidence of syphilitic osteochondritis of the long bones. When skin and mucosal lesions are present, every effort should be made to demonstrate *T. pallidum* by darkfield examination.

Penicillin Therapy of Infantile Congenital Syphilis. With the introduction of penicillin, the treatment of infantile congenital syphilis has now become relatively simple. The total dosage of

crystalline penicillin for the treatment of infants with syphilis should be not less than 100,000 units per pound of body weight. This is usually administered in aqueous solution in equally divided doses every 3 hours for 10 days.⁴ Although procaine penicillin has not yet been completely evaluated in the treatment of this condition, it appears to be as effective as the aqueous solution of the crystalline product. The daily injection of 150,000 units of procaine penicillin for 8 to 10 doses should be adequate therapy for syphilitic children under one year of age. Larger doses should be used in older children, depending on their weight. Since many of the infants with congenital syphilis are premature and malnourished, ambulatory treatment is often not advisable and hospitalization is indicated.

Post-treatment observation for infants with congenital syphilis is similar to that in adults with early syphilis. These children should not be dismissed until the serologic tests and spinal fluid have been demonstrated to be negative for at least two years and preferably five years following treatment.

Summary

The finding of a significant number of new cases of congenital syphilis in Georgia during the past two and one-half years indicates the continued prevalence of this disease. Increased attention should be given to the prevention of this condition, with particular emphasis on the diagnosis and treatment of syphilis in pregnancy.

Serologic tests for syphilis should be obtained on every pregnant woman at the initial prenatal visit and during the last trimester. Penicillin therapy should be given during pregnancy whenever there is any doubt as to the activity of the syphilitic infection. All infants born of syphilitic parents should have repeated serologic tests for at least six months after delivery to rule out the possibility of syphilitic infection.

BIBLIOGRAPHY

1. Special Report, Central Statistical Unit, Georgia Department of Public Health, 1949.
2. Cole, H. N., et al: Penicillin in Treatment of Syphilis in Pregnancy, Ven. Dis. Inform. 30:95 (April) 1949.
3. Ingraham, N. R., Jr.: Prenatal Management of Syphilis with Special Reference to Penicillin Therapy, M. Clin. North America 32:1647 (Nov.) 1948.
4. The Status of Penicillin in the Treatment of Syphilis; Syphilis Study Section, National Institute of Health, J. A. M. A. 136:873 (March 27) 1948.

NEWS ITEMS

Dr. Walter M. Bartlett, Atlanta, Veterans' Administration Southeastern Area Section chief of internal medicine, was recently a principal speaker at a two-day VA seminar on newest advances of internal medicine in Tuscaloosa, Ala. Dr. Bartlett described a study of cases incorrectly diagnosed as congestive heart failure. He urged physicians to make an effort at other treatment where illness believed to be congestive heart trouble does not respond to usual treatment. Staff members of VA hospitals over the Southeast attended sessions, held at the Tuscaloosa VA Hospital. Delegates were told by medical specialists that peptic ulcers were best treated by rest and diet, despite recent claims for new drugs and surgery.

Dr. Helen Bellhouse, Atlanta, of the Georgia Department of Public Health, recently addressed the public health nurses of the Richmond County Health Department in Augusta. She spoke on "Congenital Syphilis."

* * *

The Bibb County Medical Society held its annual business meeting and election of 1950 officers at the State Health Department Building, 811 Hemlock Street, Macon, December 6. The following officers for 1950 were elected: Dr. C. H. Richardson, Jr., Macon, president; Dr. R. W. Edenfield, president-elect; John I. Hall, vice-president; Henry H. Tift, secretary-treasurer; Drs. J. D. Applewhite and J. B. Kay, delegates; Drs. C. N. Wasden and W. W. Baxley, alternate delegates.

* * *

Dr. Tully T. Blalock, Atlanta, was recently appointed as a member of the Hospital Advisory Council to the State Board of Health. Announcement was made by Governor Herman E. Talmadge. This council will consult with the state agency in carrying out the \$70,000,000 program for building and equipping hospitals and health centers in Georgia.

* * *

Dr. William S. Boyd, well-known Augusta physician, has been named as a consultant from Georgia for the Communicable Disease center of the U. S. Public Health Service. Dr. Boyd is one of 73 authorities from 21 states, Puerto Rico, Panama, and the District of Columbia, who have been named to serve as consultants. These appointments were announced by Dr. R. A. Vonderlehr, medical director of the U. S. Public Health Service Communicable Disease Center in Atlanta.

* * *

The Bulloch County Health Department, Statesboro, set a goal of 16,000 tests for the VD-TB drive held in Statesboro and Bulloch County November 16-30. Dr. W. D. Lundquist, Bulloch county health commissioner, pointed out that it took only a few minutes to get a blood test and x-ray. The State health officials stated that 400 persons could be tested every hour.

* * *

Dr. Harley E. Cluxton, Savannah, was recently awarded a master of science degree in medicine by the University of Minnesota Medical School, Minneapolis, Minn., and the Mayo Clinic, Rochester, Minn. This honor came as the result of his research work on patients with Addison's disease. Among the substances used in his study was the new hormone Cortisone (Compound E) which later Dr. Philip Hench and his colleagues found to be so beneficial in the treatment of rheumatoid arthritis. Dr. Cluxton graduated from Johns Hopkins University School of Medicine, Baltimore, Md., in 1941. He did special work in pathology at Vanderbilt University School of Medicine, Nashville, Tenn., in 1939 and also special work in internal medicine at Harvard Medical School, Boston, Mass., in 1940. He interned at the Baltimore City Hospitals. Following the completion of his internship, he entered Mayo Clinic as a fellow in internal medicine and remained there until 1944 at which time he entered the armed services. Following the completion of his Medical Field Service course at Carlisle, Pa., he was stationed at the Army and Navy General Hospital, Hot Springs, Ark., where for one year he was in the rheumatic disease section and was for two years chief of the general medicine section. Major Cluxton received the Unit Citation award and also the Army Commendation Ribbon for meritorious service. After completing his tour of duty in the Army, in July 1947, he went back to Mayo Clinic where he remained until he returned to Savannah to open his office for the practice of internal medicine in association with his twin brother, Dr. Hayes Cluxton.

* * *

Dr. A. T. Coleman, Dublin physician and member of the Georgia Senate, has been named to the advisory

Council to the State Board of Health as provided under the provisions of the Hill-Burton Act for the construction of hospitals with federal, state and local funds. The appointment was made by Governor Herman Talmadge.

* * *

The Bibb County Medical Society held its meeting at the State Health Department Building, Macon, January 3. Important business meeting. Dr. Henry H. Tift, secretary.

* * *

Dr. A. M. Deal and his wife, Dr. Helen Read Deal, Statesboro, announce the opening of their offices for the practice of medicine in Statesboro. Dr. A. M. Deal graduated from the University of Georgia School of Medicine, Augusta, in 1939. Dr. Helen Read Deal graduated from New York University College of Medicine, New York City, in 1940. Both interned at Jersey City Medical Center and the Margaret Hague Maternity Hospital.

* * *

Dr. George B. Dowling, of Atlanta, medical director and assistant manager of the Southeastern division area of the American Red Cross, recently spoke at the regular meeting of the hospital staff of City-County Hospital, LaGrange. Dr. Dowling gave a summary of the magnitude of the Red Cross blood program on a national scale, and urged close cooperation among all those interested in its success. He is responsible for the complete health program of the Red Cross, which includes the blood program.

* * *

Dr. W. M. Dykes, Whigham, 84-year-old physician who is still answering all calls. The venerable doctor is unable to get a younger physician to come to Whigham to "share the load." He is the only doctor between Cairo and Thomasville. Dr. Dykes began his career some 58 years ago in what was then known as Greenwood Village, northwest Atlanta, and traveled horseback and in a two-wheel cart through sections of what is now Atlanta. He and Mrs. Dykes recently celebrated their sixtieth wedding anniversary with their nine children. Congratulations to Dr. and Mrs. Dykes.

* * *

Dr. W. G. Elliott, Cuthbert, recently completed a course in electrocardiography at Tulane University of Louisiana School of Medicine, graduate school, in New Orleans, La.

* * *

Dr. J. Rufus Evans, Decatur, DeKalb County health commissioner, retired January 1 after 25 years' service. He will be succeeded by Dr. T. O. Vinson, Griffin, who has served as public health officer of Griffin and Spalding County health department for 12 years. Dr. Vinson is largely responsible for the high rating of the Health Department, and it is recognized as one of the best and most efficient in Georgia. Dr. Evans' retirement will come just after the DeKalb department of public health moves into its new building on Herring Street, Decatur. "The building, with its added facilities, is the fulfillment of a dream for me," Dr. Evans said. He will practice medicine in Stone Mountain, taking up where he left off 25 years ago.

* * *

The First District Medical Society held its regular fall meeting at the Country Club, Statesboro, December 1. The meeting was called to order by Dr. W. O. Bedingfield, Savannah, president. Scientific program: "Surgery of the Sympathetic Nervous System," Dr. A. M. Deal, Statesboro; discussion: Drs. Robert Gottschalk, and Hayes Cluxton, both of Savannah; "Today's Indication for Cesarean Section," Dr. M. M. Schneider, Savannah; discussions: Drs. David Robinson, Savannah, Cleveland Thompson, Millen and John Mooney, Jr., Statesboro; "General Principles of Allergy," Dr. E. R. Cook, Savannah; discussion: Dr. Lawrence Lee, Jr., Savannah. Minutes of the last meeting read and approved. Dr. Lee Howard, Sr., Savan-

nah, chairman of nominating committee, presented the following officers for 1950: Dr. Bird Daniel, Statesboro, president; Dr. Samuel F. Rosen, Savannah, president-elect; Dr. William H. Fulmer, Savannah, secretary-treasurer. Election was by unanimous consent. Banquet at the Statesboro Country Club followed the business meeting. Dr. William H. Fulmer, secretary-treasurer.

* * *

The Fulton County Medical Society held its dinner meeting at the Academy of Medicine, Atlanta, December 1. Scientific meeting; Dr. W. M. Moncrief, moderator. "Pre-Sanatorium Care of the Tuberculosis Patient", Dr. A. Worth Hobby; "Acute Suppurative Mesenteric Lymphadenitis with Peritonitis", Dr. Joseph C. Read. Nomination of officers. Dr. A. Worth Hobby, secretary.

* * *

Dr. Daniel C. Elkins, Emory University Hospital, Emory University, was recently elected president of the Society of Medical Consultants in World War II at the meeting held in Washington, D. C.

* * *

The Georgia Baptist Hospital medical staff dinner meeting was held at the hospital in Atlanta, December 20. Dr. Lester Brown, chairman of clinico-pathologic committee, announced the topic for discussion: "Late Developments in the Treatment of Leukemia". Discussion was led by Drs. Milton Freedman and Harold W. Adams. Dr. J. C. Blalock, secretary.

* * *

The Georgia Society of Ophthalmology and Otolaryngology will hold its annual meeting at the General Oglethorpe Hotel in Savannah, March 3-4, 1950.

Members and guests are invited to make their reservations directly with the hotel. Registration fee for the lectures is \$20.

The distinguished lecturers and their subjects are: Dr. Bayard T. Horton, Rochester, Minnesota, "Treatment of the Dizzy Patient" and "Headaches—Common Varieties and Their Treatment"; Dr. John M. Converse, New York City, "Treatment of Acute Maxillofacial Trauma and Rhinoplasty"; Dr. Mercer G. Lynch, New Orleans, La., "Carcinoma of the Larynx and Methods of Approach including Lynch Suspension" and "Radical External Sinus Operations"; Dr. Meyer Wiener, Coronado, Calif., "Medical Ophthalmology" and "Surgical Ophthalmology"; Dr. Milton L. Berliner, New York City, "Slit Lamp Microscopy"; Dr. Wendell L. Hughes, Hempstead, N. Y., "Lid Reconstruction" and "Personal Procedures in Ophthalmology."

* * *

The Georgia Heart Association, Inc., in cooperation with the State Health Department and the Upson County Medical Society, presented a symposium on cardiovascular diseases at the Upson Hotel, Thomaston, December 13. Program: "Diagnosis and Management of the Cardiac Arrhythmias", Dr. J. Gordon Barrow, Atlanta; "A Discussion of Hypertension and Congestive Heart Failure", Dr. Walter Cargill, Atlanta; "A Discussion of Coronary Artery Disease and the Use of Anticoagulant Therapy", Dr. Charles F. Stone, Jr., Atlanta; "Congenital Heart Disease: A Diagnosis of the Surgically Correctable Types", Dr. Emmett Brannon, Rome. This was the first of a series of symposiums, on cardiovascular diseases to be held throughout the State under the sponsorship of the Georgia Heart Association, in cooperation with the State Health Department.

* * *

The Georgia Medical Society held its anniversary meeting at 612 Drayton Street, Savannah, December 13. Election of officers and final reports. The following officers were elected for 1950: Dr. H. M. Kandel, president; Dr. L. B. Dunn, president-elect; Dr. L. M. Freedman, vice-president; Dr. Sam Youngblood, Jr., secretary-treasurer; Drs. John L. Elliott, Ruskin King, and Ralph O. Bowden, delegates.

Dr. Harriet Gillette, Atlanta, recently addressed the newly-organized Augusta chapter of the Georgia Society for Cerebral Palsy. The meeting was held at the Dugas auditorium of the University of Georgia School of Medicine, Augusta. Dr. Gillette defined palsy as an abnormal movement of muscle. Speaking specifically of cerebral palsy, Dr. Gillette defined it as any abnormal condition which occurs within the cranial vault and which causes abnormal movement. Georgia is estimated to have 4,000 children thus handicapped.

* * *

Dr. C. W. Harwell, Cordele, Crisp County Commissioner of Health, has been appointed to a fellowship in the American Public Health Association. This fellowship is granted to those who have served efficiently over a period of years with the American Public Health Association. A fellowship certificate has been awarded to Dr. Harwell.

* * *

The Georgia Medical Society held its regular meeting at 612 Drayton Street, Savannah, January 10. Program: "Rheumatic Fever", Col. Charles Leedham, Augusta, chief of medicine, Oliver General Hospital. Discussion of change to meeting time and discussion of change from one to two meetings per month. Dr. Sam Youngblood, Jr., secretary.

* * *

Dr. M. M. Head, Zebulon, and Dr. Thomas W. Goodwin, Augusta, were recently appointed by Governor Herman Talmadge as members of the State Board of Health. Dr. Head will represent the Fourth District and Dr. Goodwin the Tenth District. Dr. Head succeeds Dr. James A. Corry of Barnesville, and Dr. Goodwin succeeds Dr. D. N. Thompson of Elberton.

* * *

Dr. T. C. Davison, Atlanta, recently attended the meeting of the Southern Surgical Association held in Hot Springs, Va.

* * *

Dr. James M. Hicks, Brunswick, has been elected chief of the City Hospital medical staff, Brunswick. He succeeds Dr. J. B. Avera, who becomes a member of the executive board. Dr. T. V. Willis was named assistant chief of staff and Dr. J. Phillip Muse, secretary. The medical staff sets up rules for physicians using the hospital and must approve any change in the rules. The purchase of a new piece of equipment for the hospital was announced. It is a Leitz photoelectric colorimeter, a machine which enables as many as 36 different blood tests to be made at the hospital.

* * *

Dr. William A. Hopkins, Emory University, and Dr. William G. Whitaker, Jr., Atlanta, have successfully completed the American Board of General Surgery examinations held at Baltimore, Md. Congratulations!

* * *

Dr. Charles G. Jordan, Eatonton, announces the addition of Dr. Hugh Crawford to the staff of Jordan's Hospital, Eatonton. Dr. Crawford graduated from Emory University School of Medicine, Atlanta, in 1941. He interned at Grady Memorial Hospital, Atlanta, and entered the U. S. Navy and saw service aboard a destroyer both in the Atlantic and Pacific theaters of operation. After three and a half years in the Navy medical corps he again served for a year and a half in surgery at Grady Memorial Hospital, Atlanta, and two and a half years at Winston-Salem, N. C. Dr. Crawford will limit his practice to surgery.

* * *

Dr. A. Worthy Hobby, Atlanta, presented a paper entitled "Cough" at the third annual clinical session of the American Medical Association, held in Washington, D. C., December 6-9.

Dr. G. Lombard Kelly, Augusta, dean of the University of Georgia School of Medicine, recently attended the Association of American Medical College's annual convention held at the Broadmoor Hotel, Colorado Springs, Colo.

* * *

Dr. J. M. Kenyon, Richland physician and surgeon, celebrated his eightieth birthday, November 27. Dr. Kenyon received congratulations from friends everywhere for his long and useful life, with many good wishes for future health and happiness. Dr. Kenyon graduated from Vanderbilt University School of Medicine, Nashville, Tenn., in 1893. During his 57 years of practice, Dr. Kenyon has attended courses at Tulane and other universities which kept him abreast with the latest medical treatments and remedies. He has been a constant student throughout the years, and holds an outstanding record as a physician and citizen.

* * *

Dr. Steve P. Kenyon, Dawson physician and chairman of the section on general practice of the Southern Medical Association, presented a paper before the general practice session at the Cincinnati meeting November 15. He spoke on "The Doctor's Obligation to His People." He called upon the medical profession for a campaign "to curb and if possible control the vicious and oftentimes false publicity about drugs through efforts of the press to glamorize them. Many feature writers are daily glamorizing some new wonder drug and stampeding the American people to rush to their druggist or physician to obtain the latest medical remedy," he declared. "American medicine is at the cross-roads of uncertainty, with loss of liberty and socialization on the left; and on the right, the type of free medicine as we now know it today," he said. Dr. Kenyon outlined a series of what he called the points necessary to be achieved "if we are to survive as democratic doctors in a democratic country." He said the profession should maintain high ethical standards, religious faith, responsibilities of citizenship, and a personal relationship between the physician and his patient.

* * *

Dr. Spencer A. Kirkland, Atlanta urologist, was guest speaker at the Upson County Medical Society meeting held at the Upson Hotel, Thomaston, December 6. He spoke on "Neoplasms of the Bladder", illustrated with lantern slides.

* * *

The Macon Hospital, Macon, recently named some 60-odd active and associate staff members, as well as the 1950 five-man executive committee. Dr. C. L. Ridley, Sr., hospital superintendent, who announced the new staff, said it is two or three men larger than 1949. Dr. C. N. Wasden is chairman of the executive committee, succeeding Dr. Ralph G. Newton, who stepped down after 16 years on the body. Other members are Drs. A. M. Phillips, M. B. Hatcher, Sam Patton and Charles Boswell. A consultant staff consisting of 19 doctors was further named along with a four-man honorary staff. The honorary staff consists of Drs. R. Frank Cary, A. R. Rozar, T. E. Rogers, and Ben Bashinski. Dr. Rozar accepted the position prior to his death, December 11. Dr. Ridley said the hospital lost four members in 1949 through death, and he named them as: Drs. Olin H. Weaver, C. L. Penington, J. P. Holmes and A. R. Rozar.

* * *

Dr. M. H. Mason, who has been associated with the staff of Stahler Clinic, Inc., Greenville, Ala., announces his association with the Joan Glancy Memorial Hospital, Duluth, January 1, as head of the medical staff. Dr. Mason graduated from the University of Georgia School of Medicine, Augusta, and served his internship at the U. S. Naval Hospital, Corpus Christi, Texas. Following his internship he spent two years as medical officer aboard ship in the Pacific, at Mare

Island Naval Hospital, and the Naval Training Center, San Diego, Calif.

* * *

Dr. Harold W. Muecke, Waycross pediatrician, performed an unusual operation on an Rh negative baby, which saved the child from certain death and made it normal and healthy. The replacement transfusion was the first at the Ware County Hospital, Waycross, and one of the few so far in Georgia, it has been said.

* * *

Dr. L. G. Neal, Jr., Cleveland physician, who has been associated in the practice of medicine with his father, Dr. L. G. Neal, Cleveland, announces the removal of his offices to Dahlonga.

* * *

Dr. Samuel E. Patton, Macon physician, was recently named president of the Bibb County Tuberculosis Association. The association recently replaced the Bibb County Anti-Tuberculosis Commission and is set up to carry out a program of tuberculosis control.

* * *

Dr. Robert E. Perry, Jr., Valdosta physician, addressed the Exchange Club of Valdosta, giving an inside picture of the medical profession. Dr. Perry traced the origin of "grandma's prescriptions" and linked them with present-day drugs. He said that science has found out how to use many drugs from these old prescriptions.

* * *

Dr. Carl S. Pittman, Sr., Tifton physician and representative of Tift County in the Legislature, did not realize his own popularity until he got into politics. It took a lot of urging to get the Tifton physician and surgeon to run for the Legislature in 1948, but when he did run he piled up more than a 500 majority over two opponents. It was his first political race. Dr. Pittman would not take any time from his practice until son, Dr. Carl S. Pittman, Jr., completed his medical education and became associated with him. The Tift representative is a native of Brooks County, a son of Charles and Mrs. Mary Minnie Reese Pittman. He graduated from the old Atlanta College of Physicians and Surgeons in 1913, and has practiced in Tifton for 35 years. One reason the people wanted Dr. Pittman in the Legislature was because of his interest in the Georgia Coastal Plains Experiment Station and Braham Baldwin Agricultural College, both located in Tift County. Dr. Pittman is a veteran of World War I. He is a charter member and past president of the Tifton Rotary Club, a Mason and a steward in the First Methodist Church.

* * *

Dr. David Quinn, manager of the Dublin VA Hospital, speaking on "The Importance of the Tuberculosis Control Program," explained to members of the Parnassus Club of Dublin that the tuberculosis control program provides for detecting the disease, isolation of the patient, the subsequent treatment of patients, and finally, rehabilitation.

* * *

Dr. Guy V. Rice, Atlanta, director of maternal and child hygiene and of mental hygiene clinics in Georgia for the Georgia Department of Public Health, recently spent two days in Augusta for inspection of the Richmond County Mental Hygiene Clinic. Dr. Abe J. Davis, Augusta, health commissioner for Richmond County, said that the visit of Dr. Rice is a routine inspection tour. The Richmond County Mental Hygiene Clinic is one of only two public health clinics of its kind in Georgia.

* * *

The Richmond County Medical Society held its regular meeting at the old medical college building on Telfair Street, Augusta, November 17. Members of the faculty of the University of Georgia School of Medicine presented a symposium on "Trauma." Dr. J. H. Sherman spoke on "The Treatment of Burns"; Dr. Robert Major discussed "Chest Injuries"; and Dr.

W. A. Risteen described "Emergency Head Injuries". Dr. Peter B. Wright discussed "Emergency Management of Fractures." The program was sponsored by the Georgia chapter of the American College of Surgeons' committee on trauma. Dr. Peter B. Wright of Augusta is chairman of the committee. The American College of Surgeons sponsors such programs through county medical societies throughout the country "in the interest of the best possible medical care for injured persons."

* * *

Dr. E. R. Cook, III, Savannah physician, was the speaker at the monthly meeting of the Savannah Society of Medical Technologists held at the Georgia Medical Society Hall, Savannah, November 13. Dr. Cook outlined the various procedures for making examinations for tuberculosis, emphasizing the importance of an early diagnosis and advising periodic chest x-ray examinations.

* * *

Dr. L. H. Shellhouse, beloved Willacoochee physician, was honored by the citizens of Willacoochee and Atkinson County on Sunday, November 13. "This is Your Life" was the theme of the program, with all phases of the doctor's life being represented by his pastor, a Mason, a patient and a co-worker. Appreciation was expressed by the speakers for his outstanding life and service to the community. A beautiful six-piece silver service was presented to Dr. Shellhouse by his granddaughter, Susan Milton, of Jacksonville, Fla., on behalf of the community.

* * *

Dr. A. W. Simpson, Jr., Washington physician, announces the opening of a new and modern doctors' office on Spring Street, Washington. The new office building is a one-story brick structure with a floor plan about 26x56 feet in dimension. It has four offices, a laboratory, a white reception room, a colored reception room, a ladies' lounge and a men's lounge. Also a lounge for the colored. Since 1940 Dr. Simpson has had his office in the Drs. Simpson, Wills and Adair office building, Washington.

* * *

The Savannah Mental Hygiene Society held its meeting in the Gold Room of the Hotel DeSoto, Savannah, November 21. Dr. W. G. Hollister, Atlanta, regional consultant in mental health, was guest speaker. Dr. Clair A. Henderson, Savannah, city-county health director, introduced Dr. Hollister, who outlined three present trends of mental hygiene programs. Dealing with preventive and personality phases of mental hygiene rather than "better care" phase, Dr. Hollister said that the first trend is "away from clinic-centered programs toward programs aimed at milder emotional problems of normal people." The second trend reviewed by the speaker is the "conversion of mental health clinics to more consultative support of health, welfare and educational facilities of the community." The third trend is toward the use of "sociodrama and group therapy technics." Dr. Hollister said he is glad to note that each state of the United States is building its own unique mental health program.

* * *

The Sixth District Medical Society held its winter meeting in the State Health Department Building, Macon, December 8. Program: "Present Treatment of Appendiceal Abscess", Dr. C. L. Ridley, Jr., and Dr. Earl Lewis, Macon; "Drug Sensitizing to Alcohol", Dr. Dawson Allen, Milledgeville; "Chronic Emphysema", Dr. Henry H. Tift, and Dr. Derrell Hazlehurst, Macon; "The Responsibility of the Surgeon", Dr. C. H. Richardson, Jr., Macon; Official Remarks, Dr. Enoch Callaway, LaGrange, president of the Medical Association of Georgia. Election of 1950 officers are Dr. John I. Hall, Macon, president; Dr. George H. Alexander, Forsyth, vice-president; Dr. A. M. Phillips, Macon, secretary-treasurer, and Dr. Dawson Allen, Milledgeville, councilor. Dinner at the Idle Hour Country

Club, Macon, with Dr. C. H. Richardson, Sr., Macon, toastmaster.

* * *

The Third District Medical Society held its meeting in Carnegie Library, Cordele, November 17, with Dr. Guy Dillard, Columbus, president, presiding. Program: "Intramedullary Nailing of Fractured Long Bones", Dr. J. C. Patterson, Cuthbert; "Management of Uncomplicated Diabetes", Dr. Nathan DeVaughn, Augusta; "Common Pituitary Disorders", Dr. Robert B. Greenblatt, Augusta; "Clinical Value of Electrocardiography", Dr. Frank Wilson, III, Leslie; "Trends in Treatment of Cancer of the Cervix", Dr. H. J. Bickerstaff, Columbus. Officers elected are Dr. Carl P. Savage, Montezuma, president, and Dr. Schley Gatewood, Americus, re-elected secretary-treasurer.

The Woman's Auxiliary to the Third District Medical Society held its business meeting and installation of district officers in the First Methodist Church. Mrs. A. R. Sims, Richland, presided in the absence of Mrs. Schley Gatewood of Americus. Officers installed by Mrs. J. R. S. Mays, Macon, first vice-president of the Woman's Auxiliary to the Medical Association of Georgia, were: Mrs. A. R. Sims, Richland, manager; Mrs. L. H. Wolff, Columbus, manager-elect; and Mrs. Franklin Edwards, Columbus, secretary. Mrs. Charles McArthur, Cordele, welcomed the visitors, Mrs. Russell Thomas, Americus, gave the response, and Mrs. J. R. S. Mays, Macon, was principal speaker.

* * *

Dr. J. G. Standifer, Blakely physician, was advanced to the office of Right Worshipful Senior Grand Warden, the third highest office in the Grand Lodge, at the 163rd annual communication of the Grand Lodge of Georgia Free and Accepted Masons on October 26. According to precedent, Dr. Standifer will become Grand Master of the Grand Lodge in October 1951.

* * *

Dr. J. A. Thrash, Columbus, executive director of the Muscogee County Health Department and of City Hospital, upon his return from a three-month tour in Europe, sounded a warning that "it is time to call a halt on centralization of all sorts" in reference to government. Dr. Thrash said he based his statement on his observations in Europe. The first American chosen by the United Nations World Health Organization for the tour, Dr. Thrash studied medical and public health affairs in several countries in Europe and will compile a report for the WHO. He asked why the United States should change "for something we don't know anything about" as he urged that welfare work of all types be kept in the hands of local people. . . . If we are going to maintain our freedom in medicine and public health and in other fields," he continued, "centralization must be curbed."

* * *

The Tri-County Medical Society (Calhoun-Early-Miller Counties) elected the following officers for 1950: Dr. W. W. Baxlev, Blakely, president; Dr. James H. Crowdis, Jr., Blakely, vice-president; Dr. Hinton J. Merritt, Colquitt, secretary-treasurer; Dr. J. G. Standifer, Blakely, delegate; Dr. C. K. Sharp, Arlington, alternate delegate. The Board of Censors is composed of Drs. James W. Merritt, Colquitt, James B. Martin, Edison, and W. H. Wall, Blakely.

* * *

The University of Georgia School of Medicine, Augusta, recently sponsored an Obstetrics Seminar at the University Hospital, Augusta, in cooperation with the State departments of Public Health of Georgia, Florida and South Carolina. Among the doctors from the Atlanta area who read papers at the seminar were: Drs. George A. Williams, R. A. Bartholomew, W. W. Coppedge, Guy C. Howell, E. D. Colvin, John B. Cross, Charles B. Upshaw, John R. McCain, C. S. Glissen, Jr., R. K. Hancock and Guy V. Rice, director of the Division of Maternal and Child Health of the Georgia Department of Public Health. Dr. Richard

Torpin, Augusta, professor of obstetrics of the University of Georgia School of Medicine, was chairman of the seminar. Dr. W. T. Tompkins, Philadelphia obstetrician, discussed "Nutrition in Pregnancy" at the meetings.

* * *

The Veterans Administration recently announced the appointment of Dr. Richard L. Harris as manager of the 1,965-bed veterans hospital under construction at Peekskill, N. Y. Dr. Harris was formerly with VA in Los Angeles, Calif., and is a member of the Laurens County Medical Society and the Medical Association of Georgia. He is a World War II veteran, and has had 28 years of VA medical service. A graduate of the University of Georgia School of Medicine, Augusta, Dr. Harris has been active in the field of psychiatry since 1920.

* * *

Dr. R. A. Vonderlehr, Atlanta, medical director in charge of the communicable disease center of the U. S. Public Health Service, Atlanta, recently announced that the Public Building Administration allocated \$500,000 for plans and specifications for a new national headquarters building in Atlanta for the communicable disease center of the U. S. Public Health Service. It is the first step in the construction of a five-building center to be built adjoining Emory University at an estimated cost of \$10,000,000. The center helps in the control and prevention of such diseases as poliomyelitis, leprosy, rabies, typhus fever and malaria.

* * *

Dr. Hoke Wammock, Augusta, head of the research department of the University of Georgia School of Medicine, recently addressed the members of the Augusta Kiwanis Club. He said, "There is more hope today than ever before for victims of cancer." A growing knowledge of cancer symptoms and broadening of education of the masses of the people is one of the main factors in the increasingly hopeful outlook where cancer is concerned, Dr. Wammock said.

* * *

The Ware County Medical Society held its annual Christmas party at the Okefenokee Golf Club, Waycross, December 1, at which Drs. W. F. Reavis, Ed Roe Stamps and Lovick Pierce were hosts. Officers for 1950 were elected. They are Dr. William A. Hendry, Blackshear, president; Dr. William C. Calhoun, Waycross, vice-president; Dr. Leo Smith, Waycross, secretary-treasurer; Dr. W. L. Pomeroy, Waycross, delegate; Dr. Leo Smith, Waycross, alternate delegate. Board of Censors are Drs. H. A. Seaman, Waycross; William A. Hendry, Blackshear, and W. M. Flanagan, Waycross. This was the 31st consecutive year in which Dr. Reavis has been host at the annual Christmas party. The members voted to hold a similar meeting next year which will make the 32nd time they have enjoyed his hospitality. (Suggestions: Give Reavis a red necktie and a bottle of Old Spice perfume.—Ed.)

* * *

The Fulton County Medical Society held its Forty-Fifth Anniversary Banquet at the Biltmore Hotel, Atlanta, January 5. Program: Call to order by Dr. Stephen T. Brown. Invocation; Installation of Officers; Inaugural Address of the President, Dr. A. O. Linch; Announcement of Committees; Presentation of the President's Key to Dr. Stephen T. Brown by Dr. Hal M. Davison; Report of the Committee on the Dr. L. C. Fischer Award, Dr. Allen H. Bunce; Award of 25-Year Membership Certificates; Address, Dr. Josiah Crudup, Gainesville, president Brenau College, and miscellaneous business. Officers for 1950 are Dr. A. O. Linch, president; Dr. Hal M. Davison, president-elect; Dr. Cyrus W. Strickler, Jr., vice-president; Drs. Hal M. Davison, Stephen T. Brown, A. O. Linch, Cyrus W. Strickler, Jr., A. Worth Hobby, Jack C. Norris, William G. Hamm, John W. Turner, Eustace Allen, board of trustees; Dr. Albert A. Rayle, judicial council; Drs. Major F. Fowler, Shelley C. Davis, J. D. Martin, Jr.,

Purcell Roberts, and board of trustees, delegates; Drs. A. Park McGinty, Lester Brown, J. D. McDaniel, Mark Dougherty, David Henry Poer, Tully T. Blalock, Harry Rogers, George Holloway, Harold McDonald, J. C. Blalock, H. Walker Jernigan, Hayward S. Phillips, and W. Perrin Nicolson, alternate delegates. Annual awards for research during 1949 were presented. The presentations were made by the committee on the L. C. Fischer awards. The committee members are Dr. Allen H. Bunce, chairman, Dr. F. Phinizy Calhoun, and Dr. Frank K. Boland. In the best original work category, the award went to Dr. Darrell Ayer, Jr., Dr. Frederick H. Thompson, and Dr. Mary Gilliland. The award for "best written paper" went to Drs. John R. McCain and Samuel R. Poliakov.

* * *

The Milledgeville State Hospital, Milledgeville, announced lectures by Dr. Leland B. Hinsie, New York City, professor of psychiatry, College of Physicians and Surgeons, Columbia University, and assistant director of New York State Psychiatric Institute and Hospital, on the subject, "Psychopathology and Psychotherapy" at the hospital January 12-14. Invited to hear Dr. Hinsie were hospital superintendents, medical and nursing staffs, social workers, and other interested personnel.

* * *

The Southeastern Surgical Congress will hold its eighteenth Postgraduate Assembly at the Shoreham Hotel, Washington, D. C., March 6, 7, 8, 9, 1950. Guest speakers include 41 outstanding physicians of the Southeast, including the following Georgia physicians: Dr. Enoch Callaway, LaGrange, will present a paper on "Carcinoma of the Cervix." Dr. J. D. Martin, Jr., Atlanta, will discuss "The Complications of Splenectomies." Dr. J. C. Patterson, Cuthbert, will read a paper entitled "Gastrocolic Fistula." Write Dr. B. T. Beasley, 701 Hurt Building, Atlanta 3, Ga., for information about the assembly.

* * *

The Fulton County Medical Society held its dinner and annual meeting at the Academy of Medicine, Atlanta, December 15. Program: "President's Message", Dr. Stephen T. Brown; Annual reports by the officers of committees; Memorial Service, Dr. L. Minor Blackford. Election of new officers. "The Sterilization of the Unfit", Dr. Blake Van Leer, Atlanta, president of Georgia Tech.

* * *

The following members of the Fulton County Medical Society were reported to the Medical Association of Georgia after the 1949 membership roster was printed: Dr. Samuel W. Norwood, 72 Eleventh Street, N. E., Atlanta; Dr. Carl A. Whitaker, Emory University Hospital, Emory University; Drs. Alvan Glenn Foraker, Grady Memorial Hospital, Atlanta (Asso.); and Thomas Lumpkin Hodges, Jr., 209 Erie Ave., Decatur (Asso.).

COMMUNICATIONS

Birmingham, Ala., Dec. 22, 1949

Dr. Edgar D. Shanks, Secretary
 * Medical Association of Georgia
 478 Peachtree Street, N. E.
 Atlanta, Georgia
 Dear Dr. Shanks:

On February 21, 22 and 23, a Seminar on Cancer will be conducted at the Medical College of Alabama in Birmingham by some of the medical profession's most widely-recognized authorities in their respective fields.

I am pleased to extend through you a cordial invitation to members of your state society to attend.

The Seminar is sponsored by the Medical Association of Alabama, the Jefferson County Medical Society, the Extension Division of the University of Alabama, and the Alabama Division of the American Cancer Society.

We have drawn on the experience of other seminars

to formulate a program that we believe will be of the greatest possible value and usefulness.

The dissimilar problems that confront the specialist and the general practitioner have been taken into consideration. Each speaker in his field will make a comprehensive presentation of the latest advances and most effective methods of detection, diagnosis and treatment in such manner as to be of exceptional value to both the specialist and the general practitioner.

An outline of the three-day program is attached.

We would like to extend an even more direct invitation to the individual members of each county society in your state. If you would be kind enough to send us the names of the secretaries of your county societies, we will write a special invitation through them to their members and provide them with printed copies of the program just as soon as they are off the press.

Those who attend the Seminar will have the added opportunity of inspecting the research activity being conducted by the Medical College of Alabama into a mass screening test for the detection of cancer. The research laboratories have been described by those who have seen them as possibly the most modern in the South.

There will be no registration fee for the Seminar. The headquarters hotel will be The Tutwiler in Birmingham. Excellent additional accommodations will be available at Hotel Molton and Hotel Redmont.

We will deeply appreciate your bringing this notice as quickly as possible to all members of your society since we anticipate a large attendance and want to accommodate all those who desire to attend.

Sincerely yours,
KARL F. KESMODEL, M.D.
Chairman, Cancer Seminar

PROGRAM

TUESDAY, FEBRUARY 21

11:00 to 12:30—*Cancer of the Pharynx-Hypo-pharynx and Larynx*—Dr. Louis H. Clerf, Jefferson Medical School, Philadelphia.

12:30 to 1:45—Lunch.

2:00 to 3:30—*Cancer of the Breast*—Dr. Frank Adair, Memorial Hospital, New York.

3:30 to 5:00—*Cancer of the Mouth*—Dr. Oliver S. Moore, Memorial Hospital, New York.

7:00 p.m.—Dinner—Hotel Tutwiler.

8:30—*Address*—Dr. Charles S. Cameron, Jr., Medical and Scientific Director, the American Cancer Society, New York.

WEDNESDAY, FEBRUARY 22

11:00 to 12:30—*Cancer of the Female Genital Organs*—Dr. A. N. Arneson, Department of Gynecology, Bernard Skin & Cancer Hospital, St. Louis.

12:30 to 1:45—*Cancer of the Lung*—Dr. William F. Reinhoff, Johns Hopkins Hospital, Baltimore.

3:30 to 5:00—*Cancer of the Colon and Rectum*—Dr. Harry Bacon and/or Dr. Lloyd F. Sherman, Temple University Hospital and Medical School, Philadelphia.

8:00 to 9:30 p.m.—*Lymphoblastomas*—Dr. Sidney Farber, The Children's Hospital, Boston.

THURSDAY, FEBRUARY 23

11:00 to 12:30—*Radiation Therapy of Cancer of the Pharynx and Larynx*—Dr. Ralph W. Caulk, Garfield Memorial Hospital, Washington.

12:30 to 1:45—Lunch

2:00 to 3:00—*Cancer of the Stomach*—Dr. Alexander Brunschwig, Memorial Hospital, New York.

3:30 to 5:00—*Radiation Therapy of Lymphoblastomas*—Dr. Ralph W. Caulk, Garfield Memorial Hospital, Washington.

AMERICAN ACADEMY OF GENERAL PRACTICE

The American Academy of General Practice will meet in St. Louis February 20-23. Among its distinguished guest speakers will be Dr. Paul B. Beeson, of Atlanta.

Atlanta, Ga., Dec. 9, 1949

Dr. Edgar D. Shanks, Editor
Journal of the Medical Association of Georgia,
478 Peachtree Street, N. E.,
Atlanta, Georgia

Dear Dr. Shanks:

The Clay Memorial Eye Clinic and the Emory University School of Medicine through the William L. Crawley Fund have established an Eye Bank at the Grady Memorial Hospital, 36 Butler Street, Atlanta 3, Georgia. The purpose of the Eye Bank is to collect and dispense eyes for use in corneal transplantation. This facility is available, without charge, to any co-operating hospital or ophthalmologists throughout the Southeast. Local transplantation in the Atlanta area is provided by the Atlanta Chapter of the Red Cross Motor Corps and regional transportation is provided through the Capital, Delta, Eastern, and Southern Airlines. All of these airlines serving Atlanta have co-operated in this program by offering their facilities without any cost. Hospitals and ophthalmologists who are interested in using this facility may write to the Eye Bank, Clay Memorial Eye Clinic, 72 Armstrong Street, S. E., Atlanta 3, Georgia, for details and the proper containers for transportation of eyes.

Thanking you and with the season's best wishes,
I am,

Sincerely yours,
MORGAN B. RAIFORD, M. D.
Clinical Director.

RESIDENCY TRAINING REQUIREMENTS

The American Board of Obstetrics and Gynecology has not made nor is it contemplating any changes in its residency training requirements, despite rumors of an increase in training years. Eligibility requirements remain the same; namely, three years of acceptable formal training, followed by at least two years of post-training practice in the specialty.

Hospitals are inspected and approved for training jointly by the Council on Medical Education and Hospitals of the American Medical Association and this board. Approvals are granted for training periods of one, two and three years depending on the available facilities and the findings of the survey inspections.

This board has no objection to residency services being arranged by hospitals for periods longer than three years, unless this dilutes the candidate's clinical training opportunities too much during the first three years. However, the board does not accept a fourth year, or more, of residency training as a substitute for any part of the required two years of post-training practice.

The importance of post-training practice in the specialty is emphasized as an opportunity for maturing of the candidate and for colleague appraisal of a man's ability when working on his own responsibility in his chosen community. The only exception to this ruling is in the case of men advancing from their training into full-time teaching positions. These men then must complete at least two years in such positions.

Copies of the Bulletin of this board, outlining the above requirements in more detail, are available to hospital administrators or to candidates, upon application.

PAUL TITUS, M.D., Secretary,
American Board of Obstetrics and Gynecology,
1015 Highland Building,
Pittsburgh 6, Pennsylvania.

MACON HOTELS

Macon hotels are: Dempsey, Lanier, Central, Southland, Colonial, and Milner. Tourist courts are: Magnolia, and Peach State. The dates of our annual session are April 18-21. Get your reservations now.

OBITUARY

Dr. James Oscar Baker, aged 82, Savannah physician, died in a Savannah hospital after a long illness, December 6, 1949. Dr. Baker, a native of Marion, S. C., and graduate of the University of Georgia School of Medicine, Augusta, in 1902, had been a resident of Savannah for 64 years. He was a member of the Georgia Medical Society, the Medical Association of Georgia, and a fellow of the American Medical Association. Survivors include his widow, a sister, Mrs. Ransom Bryant Hare, Florence, S. C., and a brother, Judge Gordon Baker, of Florence, S. C.

* * *

Dr. John Hiram Bowen, aged 83, prominent Cobbtown physician, died at his home after a long illness, December 4, 1949. Dr. Bowen was the son of the late Andrew and Martha Cameron Bowen, and was a charter member of the Cobbtown Methodist Church. He graduated from the University of Georgia School of Medicine, Augusta, in 1894. He retired from active practice several years ago. Surviving are his wife, the former Miss Pauline McGinty, and one sister, Mrs. Annie Cowart, Miami, Fla. Funeral services were held from the Cobbtown Methodist Church, with the Rev. Allen V. Johnson, Glennville, the Rev. Vernon Roberson, Claxton, and the Rev. R. C. Joiner officiating. Burial was in the Sunlight Cemetery, Cobbtown, with the Masons in charge at the grave.

* * *

Dr. Clemmie C. Brannen, aged 61, prominent Moultrie physician and surgeon, died at his home following a short illness November 16, 1949. Dr. Brannen was born in Bulloch, Ala., and graduated at Emory University School of Medicine, Atlanta, in 1914. He was an intern and resident physician at St. Mary's Hospital and Willard Parker Hospital, both in New York City. He began the practice of medicine in Moultrie in 1917, and a few months after he located in Moultrie was called into service in the U. S. Army Medical Corps of World War I. He held the rank of captain. Discharged from the Army in 1919, he returned to Moultrie. He was a member of the Colquitt County Medical Society, the Medical Association of Georgia, a fellow of the American Medical Association, and a Shriner. Survivors are his wife, the former Anna Warren Clark, two children, Dr. Joseph H. Brannen, Atlanta, and Mrs. Erle Taylor, Moultrie, two brothers, one sister and three grandsons. Funeral services were held at the First Baptist Church, of which he was a member, Dr. R. C. Gresham, assisted by the Rev. Roy McTier, pastor of the First Methodist Church, officiated. Burial was in Westview Cemetery, Moultrie.

* * *

Dr. Joseph Abner Camp, aged 72, Roberta physician, died at his home following a long illness, October 22, 1949. Dr. Camp graduated from the Georgia College of Eclectic Medicine and Surgery, Atlanta, in 1909. He was a member of the Bibb County Medical Society, the Medical Association of Georgia, and a fellow of the American Medical Association. He was also a member of the Roberta Methodist Church. He had practiced medicine in many Georgia towns, and had lived in Roberta for 19 years. He is survived by his wife, the former Miss Frances Hollis; one brother and a number of nieces and nephews. Funeral services were held at the Knoxville Methodist Church. The Rev. A. C. Pickette and the Rev. O. B. Belmont officiated. Burial was in the churchyard of Knoxville.

* * *

Dr. Jackson T. Colvin, aged 69, beloved Jesup physician, died December 8, 1949. Dr. Colvin was born in Locust Grove, and graduated from the Georgia College of Eclectic Medicine and Surgery, Atlanta, in 1903. He first practiced medicine in Odum and later moved to Jesup. In 1919, when Dr. T. G. Ritch of Odum returned from World War I, he and Dr. Colvin began a professional association that lasted 25 years. In

1924 they established the 25-bed Colvin-Ritch Hospital, which has since grown to 60 beds. Dr. Colvin retired in 1944 due to his health. He was a member of the Wayne County Medical Society, the Medical Association of Georgia, and a fellow of the American Medical Association. He was a Kiwanian, and chairman of the board of deacons of the First Baptist Church for many years. He is survived by his wife, Mrs. Mary Johnson Colvin; a son, J. E. Colvin, Jesup; a daughter, Mrs. Robert Paschal, Jesup, five grandchildren; two brothers, Dr. Ernest Colvin, Atlanta, and Dr. Andrew Colvin, Edinburg, Texas. Funeral services were held at the First Baptist Church, conducted by the Rev. Floyd Jenkins, pastor, assisted by the Rev. W. C. McKibben and the Rev. Irwin Hulbert, Jr. Burial was in Jesup Cemetery.

* * *

Dr. Clarence Goolsby Cox, died December 2, 1949 in his home at the Milledgeville State Hospital, Milledgeville. An accidental death by carbon monoxide poisoning. He was 62 years of age, the son of Mary Frances Cobb Cox and Marcus LaFayette Cox. He was born in Ellijay, Ga., December 18, 1886.

Dr. Cox attended the Dahlonega Junior College and was graduated from the University of Georgia School of Medicine, Augusta, in 1910. He interned at the University Hospital, Augusta, and was a Veteran of World War I. A past commander of the Morris Little Post No. 6, American Legion, he remained active in veterans' affairs until the time of his death. He was a member of the staff of the Milledgeville State Hospital for 23 years, served a short period as superintendent of Georgia Training School for Mental Defectives, Gracewood, Ga., returning to Milledgeville to accept the position of clinical director. He resigned this position later to work for the Dublin V. A. Hospital as Chief of Neuropsychiatry. He had just been recalled to Milledgeville the second time as clinical director when he died.

He was a member of the Laurens County Medical Society, Sixth District Medical Society, Medical Association of Georgia, American Medical Association, The Southeastern Neurological and Psychiatric Association, Atlanta Society of Neurology and Psychiatry, and The American Psychiatric Association. He was a diplomate of the American Board of Psychiatry.

He is survived by his wife, Ruth Edwards Cox; a son, James Clarence; two daughters, Mrs. Z. S. Sikes, Jr. of Durham, N. C., and Mrs. J. L. Rothery of Boston, Mass., and two grandchildren. Funeral services were held at the First Baptist Church, Milledgeville, with the Rev. James M. Terresi officiating. Burial was in Ellijay Cemetery, Ellijay.

* * *

Dr. John Parham Holmes, aged 64, well-known Macon physician, died at Emory University Hospital, Atlanta, after an illness of several weeks, November 20, 1949. Dr. Holmes was born in Macon, the son of the late Dr. Walter Holmes and Leila Burke Holmes, pioneer Middle Georgia family. He graduated from Vanderbilt University School of Medicine, Nashville, Tenn., in 1911. He was a veteran of World War I and began practicing in Macon after the war. He served for 30 years as a member of the staff of Macon Hospital. He was a member of the Bibb County Medical Society, the Medical Association of Georgia, and a fellow of the American Medical Association. Survivors include his wife, the former Catherine Blain; one daughter, Mrs. Derry Burns, Macon; one son, J. P. Holmes, Jr., Macon, and one brother, Dr. Walter R. Holmes, Atlanta. Funeral services were held at the Mulberry Methodist Church. Burial was in Riverside Cemetery, Macon.

* * *

Dr. William Fay Lake, aged 61, Atlanta radiologist, died at Clearwater Beach, Fla., December 20, 1949. A native of Simpson, W. Va., Dr. Lake was a graduate of the Atlanta College of Physicians and Surgeons, now Emory University School of Medicine, Atlanta, in

1913. He was a member of the Fulton County Medical Society, the Medical Association of Georgia, and a fellow of the American Medical Association. Dr. Lake had been radiologist at Crawford W. Long Memorial Hospital for about 25 years. He was a Mason, a member of Second Ponce de Leon Baptist Church, and Phi Chi medical fraternity. Surviving are his wife, a nephew, John D. Parmerlee, Atlanta; five sisters and a brother. Funeral services were held at Spring Hill with Dr. Monroe F. Swilley, Jr., officiating. Burial was in West View Cemetery, Atlanta.

* * *

Dr. A. Madison Puckett, aged 59, Atlanta physician, died at his residence, 3495 North Druid Hills Road, Atlanta, November 27, 1949. Dr. Puckett graduated from the Georgia College of Eclectic Medicine and Surgery, Atlanta, in 1912. He had practiced medicine in Atlanta for the past 25 years. He was a member of the Longstreet Baptist Church, Cumming. Surviving are his wife; a daughter, Mrs. C. A. Mayson; a son, A. M. Puckett, Jr.; two brothers, three sisters and several nieces and nephews. Funeral services were held at the Underwood Memorial Methodist Church with the Rev. J. Kenneth Brown officiating. Burial was in Crest Lawn Cemetery, Atlanta.

* * *

Dr. Allen Robert Rozar, aged 62, prominent Macon physician and surgeon, died at his residence, 336 E. Jackson Springs Road, Macon, December 11, 1949. Dr. Rozar was born in Macon, and graduated from the Atlanta School of Medicine, now Emory University School of Medicine, Atlanta, in 1911. He served as intern at Georgia Baptist Hospital, Atlanta, and took postgraduate work at Harvard Medical School, Boston, Mass. He was a member of the Bibb County Medical Society, the Medical Association of Georgia, and a fellow of the American Medical Association. He had been prominently connected with his profession and hospitals in Macon since 1912. Funeral services were held at the Mulberry Street Methodist Church. The Rev. M. E. Peavy and Dr. Ed F. Cook officiated. Burial was in Riverside Cemetery, Macon.

FIND STREPTOMYCIN EFFECTIVE AGAINST BACILLARY DYSENTERY

Treatment of shigellosis, a major form of bacillary dysentery, with streptomycin produces prompt relief from the disease, according to a study made by five Washington, D. C., physicians under a grant from the U. S. Public Health Service.

Writing in the September 17 *Journal of the American Medical Association*, Drs. Sidney Ross, Frederic G. Burke, E. Clarence Rice, Harold Bischoff, and John A. Washington say that lowering of temperature and reduction in diarrhea usually occurred in acutely ill patients in 12 to 24 hours after oral streptomycin therapy was begun.

All 34 patients treated with streptomycin were children, ranging in age from three months to 12 years. All had an uneventful recovery from the disease except five patients who had either a relapse or a reinfection within one month after discharge from the hospital, the doctors say, adding:

"It would require a larger series than ours to state that streptomycin is superior to sulfadiazine (in treating this kind of bacillary dysentery). However, oral administration of streptomycin could be used advantageously in patients with a sulfonamide-resistant strain of organisms as well as in those cases in which there exists a sensitivity to sulfonamide compounds.

"One may take cognizance of the relatively higher incidence of shigellosis in military personnel, especially in the tropical areas, coupled with the frequent hazard of administering a sulfonamide drug to dehydrated patients. In these conditions, orally administered streptomycin may be found to be of considerable use as a substitute drug."

HELP YOUR MIND HELP YOU

With more than half the hospital beds in the United States occupied by mental patients, mental illnesses are a real problem and now for the first time a Presidential Proclamation marks a Mental Health Week, April 24-30.

The manner in which an individual reacts to everyday situations largely displays the state of his mental health. In other words, his attitude to a given situation, whether good or bad, reveals the degree of his emotional maturity, the Educational Committee of the Illinois State Medical Society observes in a *Health Talk*.

Worry, frustration and excessive anxiety are factors that may influence a person's thinking. Jealousy, rage and inability to adjust are other factors that may, if uncontrolled, bring on, or manifest underlying psychologic disorders. Some persons, through improper training and guidance in their early years, outwardly express a normal mental attitude to everyday living, but, when confronted with one or several incidents of an unpleasant nature, "blow up." These people, unfortunately, constitute a large segment of our population.

Many persons who have physical complaints, such as an abdominal pain, often have no physical basis for that pain. This type usually shops from doctor to doctor, insisting that the pain is organically based, even when x-rays and other evidence point to the contrary. These individuals must be taught to understand how emotions can cause pain, to check their attitudes, and to help manage their own minds.

Essentially any virtue carried to excess becomes a vice. A sense of proportion in one individual can easily develop into excessive pride. Respect for others, poise, self-confidence, self-discipline, generosity, understanding and self-reliance are all positive factors in a well balanced person, yet these same attributes, if not controlled, can develop into unfavorable characteristics of extreme egoism. On the other hand, excessive humility, self-pity, self-indulgence, selfishness, hypercriticism and dependence are factors that express the inferiority complex.

The common types of mental illnesses are schizophrenia, commonly known as dementia praecox; the manic-depressions; paresis, an affliction of the brain caused by syphilis; paranoia, a condition characterized by suspicions of persecution, of delusions, or grandeur. Indeed, the classification of psychoses and neuroses is a formidable one.

Many physical conditions could be prevented if emotional upsets could be avoided. Facing the facts is important. Many persons develop complexes by "locking up" their disturbing thoughts. These people would be better off to discuss the problem with someone, thus get it out of the system and then forget about it.

Think it over. Don't let the storm of conflicting emotions create a mental illness which, very often, might create physical impairments too, such as indigestion, palpitation, headache, shortness of breath and even ulcers. Much mental suffering can be avoided by understanding your emotions. Don't feel sorry for yourself if things don't go your way. Take it in stride. You'll be happier as will those about you. By understanding yourself, you can help your mind help you.

Consult your physician and if he advises the help of a psychiatrist do so. The help of a good psychiatrist is as essential as that of a good internist or surgeon.

NURSES RECRUITED

Pinched by an alarming deficiency in nursing personnel, North Carolina has launched a unique (and successful) recruitment campaign, which is designed to catch the interest of high school girls before they have made up their minds about their careers.

The N. C. Good Health Association and the State Nurses Association agreed upon one thing—that nurses invariably like their jobs, once they are in them, but

few young girls could see anything glamorous in the onerous duties, the starched uniforms and white cotton hose.

Three years ago was launched the "Miss North Carolina Student Nurse" contest which culminated in a coronation, just like the beauty pageants. The contest was successful from the beginning, and last year the goal of recruitment of 1,000 new student nurses was exceeded by 100. A substantial percentage of the new recruits attributed their decision to enter the profession to interest aroused by the contest.

The contest is simple. Any senior nurse may enter, and district elimination contests are held, with the finals in Raleigh (this year on March 16). Kay Kyser will preside, as usual, and the nine contestants will be judged according to personal appearance, personality, scholarship, aptitude for nursing, spirit of service and speaking ability.

This last attribute is the gimmick in the matter, because the winner is taken on a tour of the state, speaking before high school and college groups in the interest of nursing as a career. The recruitment program is predicated on the idea that the effective time to get girls interested in the profession is to arouse their enthusiasm before they get into the senior class, when many of the best prospects have already planned their careers. Consequently, the Good Health Association thinks the best results of the program will show up this fall and next year.

The winner of the contest receives many courtesies. She is invited to resorts for vacations. Year before last, she was the guest of Mr. and Mrs. Kyser in Hollywood, and this year the winner will be awarded a trip arranged by Carolina Motor Club and Colonial Air Lines to Harmony Hall, Bermuda. Inasmuch as only seniors compete, and they immediately start on their careers, the prestige and publicity they receive is not calculated to hurt their advancement in the profession, either.

This year, the nine finalists will each have a retired nurse as a sponsor. These nine "grand old ladies" of the nursing profession will be selected on the basis of their service and all will be invited to attend the finals as guests of the Good Health Association.

The contest, only one in the country to inject "glamour" into nurse recruitment, has the support also of the State Medical Association and the Hospital Association. The Good Health Association director, H. C. Cranford, emphasizes that the winner of this contest is a real, genuine, 200 caret nurse, and not a cheesecake artist.

But all hands agree that the recruitment hasn't been hurt any because the winners so far have been good-lookers.

ARMY MEDICAL DEPARTMENT ANNOUNCES DEVELOPMENT OF "DRAMAMINE" SEA- SICKNESS PREVENTIVE AND CURE

Working in conjunction with civilian investigators, the Army Medical Department has sponsored development of a new drug, "Dramamine," that acts as both a cure and preventive of seasickness or motion sickness, it was announced recently by Major General Raymond W. Bliss, The Surgeon General.

Credit for the original research is given to Dr. Leslie N. Gay, of the Protein Clinic of Johns Hopkins University Hospital, Baltimore, Maryland, who first began research on the drug in 1947, and Dr. Paul Carliner, also of Johns Hopkins.

In experiments recently completed, almost total cure or prevention of seasickness, in all degrees of severity, was obtained among more than 400 passengers aboard an Army transport in heavy seas.

Both the preventive and curative values of the drug in relation to seasickness were investigated during the voyage. The physicians reported that of the men who received preventive treatment, less than 2 per cent became seasick. In the therapeutic tests, the drug

failed to give complete relief in only 5 per cent of cases.

During the extremely rough voyage, a total of 418 cases, including relapses of moderate to violent seasickness, were treated with Dramamine. Complete relief was obtained in 407 cases, with partial relief or failure in 11 cases.

Careful observation was made for unpleasant symptoms, but in not one instance, even though thousands of capsules were administered to more than 300 men, was there a complaint or evidence of discomfort which necessitated discontinuance of treatment.

Seasickness has been an important military problem because of the frequent necessity of transporting great numbers of men by air or sea and landing them in excellent physical condition. Especial attention was paid to the problem during World War II, in the course of which many drugs were used in an attempt to control its symptoms.

The drug was used extensively during the summer of 1943 aboard the U.S.S. America. Sufficient data were collected to warrant more extensive and intensive study of the drug. A brief report on the study was submitted to the Chief of Staff and The Surgeon General of the Army.

The Army secured the services of the U. S. Army Transport Ballou, a ship built for service in the relatively calm waters of the South Pacific. In order to try the drug under conditions most likely to produce seasickness, the Ballou was commissioned to carry 1,376 troops from New York to Bremerhaven, Germany, in November of last year. The North Atlantic is extremely rough and stormy at this season, and the vessel, which has more pitch and roll than ships designed for the rough waters of the Atlantic, experienced lists up to 36 degrees, which would tend to cause seasickness among even the hardiest sailors.

Four adjacent sub-level compartments, in which 485 men were quartered, were chosen so that all subjects would be exposed to the same motion of the sea. The men were divided into two groups. One group was used in a study of the drug's preventive qualities, and the other was studied to determine the curative qualities.

The men chosen for the preventive study were divided in two groups. One of these received 100 mg. of Dramamine in capsule form as the transport left New York. A similar dose was given six hours later and then one before each meal and one before retiring. The other group received a capsule containing only sugar on exactly the same schedule. Only Dr. Gay and Dr. Carliner knew who received the drug and who the sugar.

This schedule was continued for 48 hours, and then the administration of capsules was discontinued.

Of the 134 men who received Dramamine, none developed nausea or vomiting while taking the drug; only two men complained of dizziness. The physicians reported that the men maintained excellent morale, even complaining that they were unable to get enough to eat.

Of the 123 men who received the sugar capsules, thirty-five became seasick within 12 hours at sea. When placed on the Dramamine schedule the men in this group, with only one exception, derived complete relief within three hours.

In the compartment where Dramamine had been given from the start but its administration discontinued after 48 hours, 41 men reported that seasickness had developed 10 to 18 hours after the drug was omitted. The drug again was given to these men and 40 regained their normal state of health within 30 minutes to one hour after the first dose.

The group selected for the therapeutic trial did not receive any of the drug at the start of the voyage. Fifteen men became seasick, and 12 of these were immediately relieved after administration of Dramamine.

A sub-group of 33 men received sugar capsules. Nineteen men whose complaints had been nausea and dizziness were relieved within 12 hours by the sugar

capsules. They were taken off the sugar capsules and remained well. Fourteen men became progressively worse on the sugar capsules and complained of excessive nausea, extreme dizziness, and prolonged vomiting. After Dramamine was given, complete relief followed within half an hour after the first dose.

Other men aboard the ship became ill, 195 reporting severe symptoms of seasickness. Of this group, 187 were completely relieved within an hour after administration of the first capsule.

A number of men were so ill they could not retain the capsule in the stomach. The drug was given by rectum and within an hour they were able to retain both fluids and solid food.

All previous remedies had been combinations of various drugs, such as scopolamine, one of the barbiturate preparations. Dramamine is a single chemical which is believed to have a direct effect on the vomiting center in the brain. It is a member of the chemical family of benadryl and pyribenzamine, which are used in the treatment of certain allergic conditions. The complete chemical name is beta-diaminoethyl benzo-hydril ether 8-chlorotheophyllinate.

Future plans call for broadening of experiments with Dramamine to include such means of travel as landing craft, small boats, and aircraft.

BREATHING THROUGH YOUR NOSE

Aside from its cosmetic effect, the nose has an important function in the health of the body. Composed of cartilage and small bones, the nose acts as a conveyor of air to the lungs which are the breathing apparatus of the body, the Educational Committee of the Illinois State Medical Society states in a *Health Talk*.

The lobule or tip of the nose is of a soft structure and acts as a valve. Inside the nose is a partition known as the septum. It separates the right from the left side and maintains the rigidity of the pathway through which the air passes as it goes through the nasal structure, also helping to give force and direction to the air current, much like the nozzle on a garden hose.

Very often, through accident or disease, these air passages are obstructed. When this happens, one sees the victim breathing through his mouth. This is not a good sight, for there is something about the person's expression that suggests a vacuous or dull mentality, a suggestion only and seldom true.

The lining or mucous membrane of the nose is very sensitive and damage or injury renders it very susceptible to infections that can easily impair the general health of the body.

The hair serves to filter out dust or infectious material that enters the nose from the air. The breathing passages of the nose into the lungs are quite small, curved and rigid and obstructions of any kind may prove serious. When for any reason the function of these individual units is impaired, improper and inadequate breathing is apt to result.

Plastic surgery is utilized in the repair of the nose, serving to restore good function and, frequently, improved cosmetic appearance.

It is well recognized that an unsightly looking nose, whether a congenital development or accidentally incurred, may be the source of deep-rooted emotional conflict. A person who wishes a cosmetic repair should not be criticized, for it is the feeling of well-being in every man that gives him a sense of equality with his associates. Indeed, it is this very cosmetic repair that has returned many criminals and social outcasts to a world of acceptance and competition.

In surgical repair, the required bones and cartilages are usually taken from some section of the patient's body. It is interesting that cartilage is the body tissue most resistant to infection. It also requires less nourishment than other tissues. Thus it can be safely

transplanted to another area with good results. Very often in nasal repair, a skin flap from the forehead is used.

When a nose has been destroyed by accident or disease, a completely new nose has to be fashioned from neighboring tissues. The most common repair, however, consists of rearranging and remodeling the nasal tissues still present to give the best function and most pleasing effect.

Big deformities can grow from childhood injuries and infections. Wise is the parent who detects breathing difficulties in the child. Early correction will obviate the development of later complications.

BOOK REVIEWS

Essentials of Obstetrical and Gynecological Pathology. By Robert L. Faulkner, M.D., F.A.C.S., and Marion Douglass, M.D. Published by C. V. Mosby Company, St. Louis, Mo. Second edition, 1949.

The book is composed of 357 pages, containing 300 illustrations, including 3 color plates. The authors are both practitioners and teachers in their respective fields, have had years of clinical and surgical experience; therefore both are well fitted to write essentials concerning the subject.

The volume is well-written and printed in large readable type which not only obviates the necessity of eye glasses, but makes the reader pleasantly comfortable. The illustrations are excellent. The treatise is systematic beginning with the elementary histology and ending with a chapter on pregnancy. I was impressed with the discussions about the ovary, and the cervix. It was surprising to note there was no mention about Papanicolaou's original methods for diagnosis of cervical cancer. No cognizance has been taken either about the use of the antibiotics in gynecology. Some are using these substances to combat infections.

Physicians, and especially students who desire competent information in gynecologic and obstetric pathology, will find this book very valuable. It is so compact that much can be found without reading a great mass of material elsewhere.

JACK C. NORRIS, M.D.

* * *

Social Medicine: Its Derivations and Objectives. By The New York Academy of Medicine Institute on Social Medicine, 1947. Edited by Iago Galdston, M. D. Cloth. Price 2.75. Pp. 294. Published by The Commonwealth Fund, 41 East 57th Street, New York 22, N. Y., 1949.

* * *

Teaching Psychotherapeutic Medicine. An Experimental Course For General Physicians. Given by Walter Bauer, M.D., Douglas D. Bond, M.D., Henry W. Bronsin, M.D., Donald W. Hastings, M.D., M. Ralph Kaufman, M.D., John M. Murray, M.D., Thomas A. C. Rennie, M.D., John Romano, M.D., Harold G. Kolff, M.D. Edited by Helen Leland Witmer, Ph.D., Introductory Chapter by Geddes Smith. Cloth. Price \$3.75. Pp. 464. The Commonwealth Fund, 41 East 57th Street, New York 22, N. Y., 1948.

* * *

Trends in Medical Education. By The New York Academy of Medicine Institute on Medical Education. Edited by Mahlon Ashford, M. D. Cloth. Price \$3. Pp. 320. Published by The Commonwealth Fund, 41 East 57th Street, New York 22, N. Y., 1949.

* * *

Widening Horizons in Medical Education: A Study of the Teaching of Social and Environmental Factors in Medicine 1945-1949. A Report of the Joint Committee of the Association of American Medical Colleges and the American Association of Medical Social Workers. Co-Chairmen, Jean A. Curran, M. D., Eleanor Cockerill. Cloth. Price \$2.75. Pp. 228. Published by The Commonwealth Fund, 41 East 57th Street, New York 22, N. Y., 1948.

Ecology of Health. By The New York Academy of Medicine Institute on Public Health. Edited by E. H. L. Corwin, Ph.D. Cloth. Price \$2.50. Pp. 196. Published by The Commonwealth Fund, 41 East 57th Street, New York 22, N. Y., 1949.

* * *

For the New Mother. By Mildred V. Hardcastle, R.N. Illustrated by Shirley Tattersfield. First edition. The John C. Winston Company, 1010 Arch Street, Philadelphia 7, Pa., Publisher, 1949.

This book "is a complete guidebook for baby's first year. How to make formula, how to prepare baby's bath, what to feed baby, how to clothe him—the new mother's first questions are easily and thoroughly answered. This book does not stop here. Mildred V. Hardcastle, in a friendly, mother-to-mother manner, has included suggestions on menus, schedules, diseases, emergencies, baby sitting, thumb-sucking, plus friendly advice for the mother to insure her health and her happiness."

* * *

Handbook of Medical Management. By Milton Chatton, A.B., M.D., Instructor in Medicine, University of California Medical School, San Francisco; Sheldon Margen, A.B., M.D., Clinical Instructor in Medicine and Research Associate in Medicine, University of California Medical School, San Francisco; and Henry D. Brainerd, A.B., M.D., Assistant Clinical Professor of Medicine and Pediatrics, University of California Medical School, San Francisco, Assistant Clinical Professor of Pediatrics, Stanford University School of Medicine, Physician in Charge, Isolation Division San Francisco Hospital. Price \$3. Pp. 476. First edition. University Medical Publishers, Post Office Box 761, Palo Alto, California, 1949.

This handbook looks good. It looks still better when the authors say, "We believe that a book on medical management can only be of greatest value when it is revised at regular and frequent intervals. This handbook will be revised yearly so that new and accepted measures and methods can be incorporated. It is hoped that by this plan we can always present a helpful and valuable pocket manual."

* * *

The Origin of Medical Terms. By Henry Alan Skinner, M. B., F.R.C.S. (C.), Professor of Anatomy, University of Western Ontario. Cloth. Price \$7. Pp. 379. The Williams & Wilkins Company, Baltimore, 1949.

This book should be a boon for every student of medicine. It is attractive and will look well in any library.

* * *

Antibiotics. By Robertson Pratt, Ph.D., Associate Professor of Pharmacognosy and Plant Physiology, University of California College of Pharmacy; Consultant on Antibiotic Research and Jean Dufrenoy, D. Sci. (Pharis), Research Associate in Antibiotics, University of California College of Pharmacy. Cloth. Price \$5. Pp. 255, with 66 illustrations. J. B. Lippincott Company, East Washington Square, Philadelphia, Pa., 1949.

This book truly portrays an honest effort to bring to its readers the newer knowledge of antibiotics.

* * *

Physiology of Heat Regulation and The Science of Clothing. Prepared at the Request of the Division of Medical Sciences, National Research Council. Edited by L. H. Newburgh, M.D., Professor of Clinical Investigation, The Medical School, University of Michigan. Cloth. Pp. 457. Illustrated. W. B. Saunders Company, Philadelphia, Pa., 1949.

This book, as stated above, was prepared at the request of the Division of Medical Sciences of the National Research Council. Various authors from various sections of the world aided Dr. Newburgh. The newer knowledge regarding the subjects covered should be helpful to many people.

Human Pathology. By Howard T. Karsner, M.D., LL.D., Former Professor of Pathology, Western Reserve University; Medical Research Advisor to the Bureau of Medicine and Surgery, United States Navy. Seventh edition. Cloth. Price \$12. Pp. 927, with 562 illustrations in Black and White and 22 Subjects in Color on 14 Plates. J. B. Lippincott Company, Philadelphia, Pa., 1949.

Ripe with experience as a teacher and research worker in human pathology, Dr. Karsner now brings to those whose purpose it will be to use his book up-to-date information. The book is attractive in every way.

* * *

An Atlas of Amputations. By Donald B. Slocum, M.D., M.S., Orthopedic Surgeon, Sacred Heart General Hospital, Eugene, Oregon; Member of American Academy of Orthopaedic Surgeons; Member of the American Society for Surgery of the Hand; Branch Consultant in Orthopaedic Surgery, U. S. Veterans Administration; Formerly Chief of the Amputation Section, Walter Reed General Hospital, Washington, D. C. Pp. 562, with 564 illustrations. Published by The C. V. Mosby Company, St. Louis, 1949.

Every atlas must or should have numerous illustrations. This one by Dr. Slocum, a recognized authority on amputations and the subsequent handling of patients who have had amputation performed, is in the opinion of the reviewer complete in every detail and should prove most helpful in solving many complex problems both for the surgeon and amputee.

* * *

Fundamentals of Internal Medicine. By Wallace Mason Yater, A.B., M.D., M.S., Director Yater Clinic, Washington, D. C. Third edition. Cloth. Price, \$12. Pp. 1451, with 315 illustrations. Appleton-Century-Crofts Company, Inc., 35 W. 32nd St., New York 1, 1949.

The first edition of this book appeared in 1938. It originally was designed to present the essentials of internal medicine in the simplest possible form for students and practitioners. This objective has been achieved.

There are eighteen contributors in addition to Dr. Yater. Nevertheless, the simple style and concise presentation has been maintained throughout. The four closing chapters are somewhat unusual and deal, respectively, with "Symptomatic and Supportive Treatment," "Inhalational Therapy," "Clinical Values and Useful Tables" and "The Physician Himself," the latter including brief discussions of internships, licensure, specialist certification, medical ethics and similar non-scientific material, all of which is interesting and useful.

Dr. Yater remarks in the preface to this edition that he was struck with the tremendous number of changes and additions necessary. Indeed, this problem must have been faced by everyone revising a textbook during the past few years.

The attempt at simplification may have gone too far in some cases. Most of the rarer diseases are discussed so briefly that they are hardly worth mentioning at all. For example, David's disease is dismissed with the statement, "This is a rare condition of women in which there are submucous and subcutaneous hemorrhages with normal blood factors."

A convenient list of recommended texts appear at the end of each chapter. It is difficult to keep these up to date. For example, on page 665 Means' book, "The Thyroid and Its Diseases," is listed as published in 1937 although the most recent edition appeared in 1948. Similarly, on page 1387 Wiprud has a new edition of "The Business Side of Medical Practice."

All in all, this book undoubtedly has met a real need and should continue to be of help to the busy practitioner and the overburdened medical student.—*J.A.M.A.*, Oct. 22, 1949.

THE JOURNAL

OF THE

MEDICAL ASSOCIATION OF GEORGIA

PUBLISHED MONTHLY under direction of the Council

Vol. XXXIX

Atlanta, Georgia, February, 1950

No. 2

BREECH PRESENTATION: IS FETAL EXTENSION AN ETIOLOGIC FACTOR?

GUY L. CALK, M.D.

and

RICHARD TORPIN, M.D.

Augusta

Literature on the subject of breech presentation is readily available from the standpoint of management and treatment, but very little has been written and still less research has been done concerning the etiology of this presentation. It is generally stated that anything which disturbs the normal utero-fetal accommodation by altering either the space in the uterine cavity or the shape of the fetal ovoid, predisposes to breech presentation. Little attention is given to the intrauterine attitude and activity of the fetus as a causative factor in breech presentation because there has been a tendency in the past to assign to the fetus a passive rather than an active role in determining its ultimate position. Not until 1940, when Vartan^{1,2} first suggested that an extended attitude of the fetus might be a cause rather than effect of breech presentation, due to interference with fetal activity, was interest renewed in the causation of this error of polarity.

Even today the popular textbooks of obstetrics list various causes of the breech presentation and these may be reiterated as follows: contracted pelvis, polyhydramnios,

low insertion of the placenta, fetal malformations, especially hydrocephalus, tumors obstructing the birth canal, abnormally shaped uteri, including arcuate, bicornuate, and septate configurations, prematurity, and multiple pregnancy. In some textbooks it is even stated that a satisfactory answer as to the cause of most breech presentations can not be given. With the exception of prematurity and multiple pregnancy, one is impressed with the relative infrequency of occurrence of these alleged causes.

Prematurity has definitely been established as a predisposing factor in breech presentation. Weisman³ in studying fetal polarity by roentgenographic methods at certain stages of pregnancy, found that the breech presentation was common until the last month or so of pregnancy, having observed in 100 primigravidous women at 5 months' gestation the breech presentation in 24 cases and in two cases an oblique or transverse presentation. Only seven of the 24 cases of breech persisted until the eighth month of gestation. Both transverse presentations turned to a cephalic presentation spontaneously. Hence it is necessary to separate the premature from the mature in making a study of the causes of breech presentations. The generally accepted dividing line of the infant's weight in differentiating between maturity and prematurity is 2500 grams or 5.5 pounds.

Twin pregnancy should likewise be excluded from any study concerning the etiology of breech presentation since most physicians will agree that the multiple pregnancy predisposes to a breech presentation in one fetus. This may be due to interfer-

From the Department of Obstetrics and Gynecology, University of Georgia School of Medicine, Augusta, Georgia.

Read before the Medical Association of Georgia in annual session, Savannah, May 12, 1949.

ence with fetal activity but more likely to natural accommodation.

A critical analysis of the suggested causes of breech presentation with the exclusion of prematurity and multiple pregnancy was made by Tompkins⁴ from hospital records in 677 deliveries by the breech mechanism. He could account for only 15 per cent of these deliveries on the basis of accepted etiology, having placed contracted pelvis as a causative factor in 11 per cent, gross fetal malformations in 1.4 per cent, placenta previa in 1.2 per cent, and pelvic tumors in 0.6 per cent of the cases.

As we review the alleged causes of breech presentation, we find that some causes were used in their loosest sense and others were difficult to define. For instance, concerning contracted pelvis a standard could be set down to denote whether or not a pelvis is contracted but with such a standard we would be incorrect in saying that some infants could not deliver through a small pelvis. Neither would we be correct in saying that a pelvis is adequate when the infant is exceedingly large and could not deliver due to cephalo-pelvic disproportion.

Polyhydramnios is another reputed cause of breech presentation but there is no universal agreement concerning the amount of amniotic fluid necessary to constitute this condition. It has been our policy at the University Hospital to denote by polyhydramnios an estimated volume of amniotic fluid of more than 2000 cc.

Abnormality of the uterus as such is a rather infrequent occurrence. We do not doubt, however, that any abnormality of the uterus in which there is encroachment on or modification of the uterine cavity will cause breech presentation by altering fetal activity to the extent that it is impossible for the fetus to assume a cephalic presentation. This point also speaks in favor of uterine tumors being causative where interference

with fetal activity exists, but not because the birth canal is obstructed.

Gross fetal malformations have been noted to increase the incidence of faulty presentation in large series of cases. Young⁵ has pointed out that two thirds of infants with gross fetal malformations will deliver by the occiput presentation, while the remaining one third will deliver by combination of breech, transverse and other cephalic presentations. It should be mentioned, however, that fetal malformations may cause diminished activity within the uterine cavity, since it is frequently observed that malformed infants have a tendency to be languid after birth.

Our study was undertaken at the suggestion of Dr. Eugene L. Griffin of Atlanta, Georgia, as an effort to investigate the relationship, if any, of fetal extension to breech presentations persisting at term.

Our original study was based on a total of 118 cases of breech presentation on which roentgenograms were available. However, the hospital records could be found to complete this study in only 88 cases. We have included only mature single breech cases, since prematurity and multiple pregnancy are admittedly predisposing causes. The majority of the 88 roentgenograms were taken with the patient in the right lateral position because it has been routine for the past ten years to take lateral films of the abdomen in all staff pregnancy patients admitted to the hospital, in order to determine the exact position and site of placental insertion whenever possible. This study is thought to be the only one which deals directly with the roentgenographic interpretation of intrauterine fetal attitude, although in 1941 Stein⁶ reported that the extended attitude of the fetus was generally observed in roentgenograms of breech presentation, but gave no statistical analysis to prove his statement. The roentgenographic interpre-

tation in making a study such as this must be done with extreme care in order to avoid errors. Particular attention has been placed on accurate visualization of the extremities so that the bones of the upper and lower extremities would not be confused. More emphasis has been placed on the position occupied by the lower extremities, for it is our opinion that extension of the legs at the knees, as seen in frank breech deliveries, has the most important role of interfering with fetal activity by its splinting effect. In some cases, as would be expected, the lower extremities were difficult to visualize due to the low station of the breech in the pelvis. Whenever difficulty was encountered in the interpretation, the fetal attitude was assumed to be full flexion with no further argument. In order for the fetal attitude to be designated as extension, one or both lower extremities had to be extended at the knees more than an angle of 90° so that a splinting effect was demonstrable. Only full extension of the head is tabulated in the results, since a simple military attitude of the head is not considered of significance in obstructing fetal activity to the extent of being causative in breech presentations persisting to term.

In analyzing the 88 roentgenograms of breech presentations at term, we observed an extended fetal attitude as depicted above in a total of 61 instances, or 69.32 per cent. A differential study revealed both lower extremities extended as in frank breech presentations in 40 instances, or 45.46 per cent, one lower extremity extended in 18 instances, or 20.46 per cent, and the head extended in 3 instances, or 3.42 per cent. The flexed attitude was observed in 27 instances, or 30.68 per cent.

An equal number of unselected films in which the cephalic pole presented was studied for comparative purposes. The same requirements which were used to de-

note extension in the breech group of films are maintained in this study. In the 88 cephalic presentations, the extended attitude of the fetus was observed in a total of 12 cases, or 13.64 per cent. None of this group revealed extension of both lower extremities or extension of the head, but one lower extremity was extended in all 12 cases.

From the foregoing study it appears that an extended fetal attitude has a causal relation to breech presentation persisting at term.

An additional study was made from the roentgenograms to determine the role played by the site of placental insertion in causing the breech presentation, since low insertion of the placenta was given as an alleged cause. In lateral films of the abdomen, we have found that the site of placental insertion can be visualized in approximately 85 to 90 per cent of the cases. We were able to visualize the site of insertion of the placenta in 88.64 per cent in the breech group and in 93.20 per cent of the cephalic group of films. The results of this study revealed the placental location to be high on the posterior uterine wall in 51.14 per cent in the breech group, as compared to 56.82 per cent in the cephalic group. The placenta was located high on the anterior uterine wall in 34.09 per cent in the breech group, as compared to 36.37 per cent in the cephalic group. In so far as a low insertion of the placenta is concerned in the breech presentations, one film demonstrated a low insertion of the placenta on the posterior uterine wall and two films demonstrated a low insertion of the placenta on the anterior uterine wall. From this study we conclude that the site of placental insertion has little significance in causing the breech presentation.

A review of the hospital records in the 88 cases of breech presentation serves to com-

plete our study. In 18 cases, as is generally done when practical, prophylactic external version was performed and the infants were delivered from a cephalic presentation. In 4 cases, with the splinting effect of the legs prevailing, prophylactic external version met with failure, even after repeated attempts. The diagnosis of polyhydramnios was made clinically in only one case. The hospital records confirmed the only case of hydrocephalus in which the diagnosis was initially made by roentgenographic interpretation. Cesarean section was performed in 3 cases. In one, the patient was a staff case and cesarean section was performed because of an exceedingly large infant weighing 12 pounds 4 ounces at birth. The two remaining cesarean sections were performed on private patients, the indication in both being given as a small pelvis with a large infant. No mention was made in any case record of placenta previa, uterine tumors, or deformities of the uterus.

In summary, the alleged causes of breech presentation were critically reviewed and were found to play very little part in the etiology in reported series studied. A roentgenographic survey of 88 cases of breech presentation was made to determine the incidence of an extended intrauterine fetal attitude. The investigation revealed an extended attitude in a total of 61 instances, or 69.32 per cent. Both lower extremities were found to be extended in 40 instances, or 45.46 per cent, one lower extremity extended in 18 instances, or 20.46 per cent, the head extended in 3 instances, or 3.42 per cent, and a full flexion attitude of all appendages was observed in 27 instances, or 30.68 per cent. A comparable study was made in a similar number of roentgenograms in which the cephalic pole of the fetus was presenting. In this group of films the extended attitude was observed in a total of 12 instances, or 13.64 per cent. In no incident was an attitude of extension of both lower

extremities or extension of the head noted. One lower extremity was extended in all 12 cases. The site of placental insertion from a study of the roentgenograms was found to have no statistical significance in causing breech presentation.

BIBLIOGRAPHY

1. Vartan, C. Keith: Cause of Breech Presentation, *Lancet* 1: 595, 1940.
2. Ibid: Behavior of Fetus in Utero with Special Reference to the Incidence of Breech Presentation at Term, *J. Obst. & Gynec. Brit. Emp.* 52:417 (Oct.) 1945.
3. Weisman, A. I.: An Antepartum Study of Fetal Polarity and Rotation, *Am. J. Obst. & Gynec.* 48:550, 1944.
4. Tompkins, Pendleton: An Inquiry Into the Causes of Breech Presentation, *Am. J. Obst. & Gynec.* 51:595 (May) 1946.
5. Young, R. L.: Abnormal Presentation Among Malformed Infants, *Am. J. Obst. & Gynec.* 52:419, 1946.
6. Stein, I. F.: Deflection Attitudes in Breech Presentation, *J.A.M.A.* 117:1430, 1941.

BICORNATE UTERI: OBSTETRIC COMPLICATIONS

T. SCHLEY GATEWOOD, M.D.

Americus

This congenital anomaly exists more frequently than realized. Everyone doing obstetrics should consider this anomaly when complications of pregnancy or labor occur. I have had three known cases of bicornate uteri in my practice during the past six years. The complications arising in one case were the stimuli for this paper. A review of the complications found in the literature has been made. To bring these to our attention should make us more conscious of this anomaly and its complications, thus improving our diagnostic acumen as obstetricians and as surgeons.

The occurrence of this maldevelopment is better understood when we realize how the vagina and the uterus develop in embryo. There is a fusion from below upwards of the two mullerian ducts. Improper fusion can result in varied anomalies. Any variation observed in the lower genital tract, such as vaginal septa or cysts, or double cervixes, should bring to mind the possibility of mal-fusions in the upper genital tract. (Show slide of anomalies).

Very able investigators^{1 2} have estimated

the frequency of occurrences in pregnancy. Their estimates vary from one case in 100 pregnancies to one case in 1500 pregnancies.

Complications

1. *Bleeding During Pregnancy.* The non-pregnant horn may continue to menstruate at monthly intervals—this may be very confusing. Mrs. B, one of my cases did this. Gill³ stressed that bleeding with pregnancy and adnexal mass, as presented by rudimentary horn, may cause false diagnosis of tubal pregnancy.

2. *Ectopic Pregnancies.* Beaver and Abbott⁴ report one case but found in reviewing the literature from 1922 to 1936 there were over 40 such cases in 246 cases of malformations of the uterus.

3. *Incarceration or Torsion of Nonpregnant Cornu.* A case of unilateral hysterectomy of the nonpregnant cornu (enlarged due to hormonal influence) that had become incarcerated in the pelvis has been reported (Moore⁵) successfully carried out without interruption of a 2½ months pregnancy in the horn.

4. *Repeated Miscarriages.* Aldridge⁶ reports a case that aborted four times then had excision of the extra cornu and then aborted the fifth time, but carried a sixth pregnancy to term, being delivered by cesarean section; a seventh pregnancy reached term but the uterus ruptured. The baby was asthenic and died four hours after birth.

5. *Mummified Fetus.* Pearson⁷ reported an interesting case where the fetus had died and became mummified, a supracervical hysterectomy being done the 13th month of gestation; the other horn, which appeared normal at operation, delivered a 9 pound boy one year and four days following operation. Labor was without serious complications.

6. *Passage of Decidual Cast.* Corbett⁸ reported a decidual cast of the nonpregnant cornu being expelled three weeks before

term; an uneventful delivery occurred ten days later.

7. *Accompanying Other Malformations.* Rogers and Blocksom⁹ reported a case of pregnancy in a bicornate uterus, who also had a congenital absence of arms with a rectovaginal fistula and a congenital heart. Browne¹⁰ had a vaginal wall cyst, either arising from Gartner's duct or the Wolffian duct, that prolapsed in front of the baby's head, necessitating aspiration.

8. *Twins and Superfetation.* Moncure¹¹ reports one case that was with twins again 4½ months after cesarean for twins. Other authors have reported twin pregnancies. Pregnancy in both horns may cause poor contractures, malpresentations, and necessitate cesarean section. Such a case was reported by Bailey¹³. Brase¹⁴ delivered twins from separate cornu weighing 5 lbs. 12 ozs. and 6 lbs. 9 ozs.

9. *Dystocia.* Here the nonpregnant cornu prolapses under the pregnant portion causing obstruction. The nonpregnant horn undergoes considerable enlargement during pregnancy due to an accompanying hormonal influence. Adam¹⁵ reports such a case. The patient's first child was a still-born due to difficult labor. The second pregnancy was terminated by cesarean operation. (One of my cases was similar to this—Mrs. B). He also reports another case who miscarried once and then with the second pregnancy the nonpregnant cornu was excised at five and one half months and at term the delivery was uneventful.

10. *Rupture of Uterus.* Moore⁵ states that rupture of the pregnant horn and torsion or incarceration of the nonpregnant horn in the pelvis are the more common abdominal emergencies occurring during pregnancy. He cited 9 cases found in the literature of rupture of the uterus during a ten-year period. Ritter¹⁶ describes Benoit Vassal's case in 1669, "a woman of 32 years of age who gave birth to eleven children

spontaneously and who died suddenly during the third or fourth month of her twelfth pregnancy. At postmortem examination a bicornate uterus was found with rupture of the rudimentary left horn of the uterus, with hemorrhage and extrusion of the fetal contents into the peritoneal cavity. It seems that the previous pregnancies were in the right uterus." Robinson¹⁷ has reported a case of rupture of the bicornate uterus at 38 weeks of pregnancy caused by lying on the stomach for x-ray studies. Titus¹⁸ states that "pregnancy in bicornate uterus or uterus didelphys is as serious as that in a tube because of the danger of rupture." Ewer¹⁹ warns that pregnancy in the rudimentary horn is more dangerous because sometimes there is no connection between the horns and rupture will occur. He also observed that breech presentations seem more frequent.

11. *Retained Placenta.* Two cases have been reported.

12. *Postpartum Hemorrhage.* Caused by atony in the third stage has been reported.

REPORT OF CASES

Case 1. A. P. B., aged 26, white female, para 1, grav 1, reported 11 weeks after the last menstrual period complaining of nausea and vomiting. Pelvic examination revealed a soft, blue cervix that felt continuous to a mass in the left adnexa, and in the right adnexa was a larger orange-size mass with nodular projection into the vagina. Impressions: Pregnancy (1) uterine and right tubal, (2) right tubal, (3) uterine with dermoid cyst. A consultant saw her and thought she had a (4) uterine pregnancy with right pyosalpinx. Two weeks later she was feeling better but reported having noticed a dark bloody discharge for past four to five days. Pelvic findings were essentially the same; speculum examination revealed "an old blood clot or piece of placental tissue" lying in the os. (In retrospect she must have been bleeding from the nonpregnant cornu and perhaps shedding a decidual cast). At the next two weeks' visit pelvic examination revealed the fundus seemingly symmetrical and the cervix running unusually posteriorly. She was seen at two-week intervals to term, no further pelvic examinations being done as her prenatal progress appeared to be normal. At term she went into labor; vaginal examination showed a large thick mass about 6 cm. diameter in the left posterior pelvis; a consultant examined the patient and agreed that the patient had a fibroid of cervical origin, that it was blocking the passage sufficiently to prevent vaginal delivery and that a cesarean was indicated. At operation a bicornate uterus was found; the right cornu was 8 cm. in diameter and was rotated and prolapsed into the posterior pelvis; a small benign pedunculated fibroid arose between the two cornu.

The multiplicity of impressions and the threat of

abortion caused much concern during the first few weeks, all because the proper diagnosis was not made.

Case 2. Mrs. W. M., aged 37, white female, para 111, grav 111, was first seen by me at home on a cold rainy night in February 1941 in hard labor with breech presenting; delivery terminated spontaneously and quickly. Two previous labors had been normal also. On April 21, 1948 she reported her last menstrual period March 12-18, and slight spotting on April 17 and 18, with pain in left side as at last parturition in 1941, and continues to have slight abdominal pain. Pelvic: cervix soft; fundus slightly enlarged and pushed to right by hard mass which extends almost half way to umbilicus. Three weeks later, on May 11, she reported having spotted on May 5 and May 10, and that pain and soreness in the left side continued. She was explored with these preoperative impressions: (1) ovarian cyst, (2) ectopic, (3) bicornate uterus-pregnant. Operation revealed a bicornate uterus; the left cornu was 8 cm. in diameter, soft and blue containing a 7 weeks embryo, and the right cornu was 4 cm. diameter. A supracervical hysterectomy was done. Convalescence was uneventful.

This case illustrates how spotting with pregnant bicornate uteri confuses the diagnosis, and that normal pregnancy and labor occurs.

Case 3. Mrs. T. J. R., white female, aged 31, para 1, grav 1. Chief complaint: sterility and dysmenorrhea of long standing—seven years previously had normal delivery of full term male infant. Pelvic examination showed a large hard stellately lacerated cervix with erosion and acute tenderness to motion. Palpation of fundus unsatisfactory. Biopsy cervix: no evidence of malignancy. Eight months later in left angle of cervical laceration a sinus about 3 cm. deep could be probed; the lower broad ligaments remained tender. The fundus was normal size and to the right; the left adnexa contained a firm mass somewhat larger than a golf ball. Dysmenorrhea continued marked, and patient complained severely of a heavy bearing down feeling in the lower abdomen. At laparotomy a bicornate uterus with many adhesions throughout pelvis was found and a total hysterectomy was done. Convalescence was uneventful.

Preoperatively, this patient was thought to have an ovarian cyst, though a bicornate uterus was considered. Three years postoperative a large vaginal fold 3x5 cm. was noted in the posterior proximal half of the vagina. This fold undoubtedly represented poor fusion of the lower müllerian ducts. This case demonstrates that I failed to examine the vagina properly preoperatively. I failed to discover this diagnostic clue until I became more conscious of bicornate uteri.

Discussion

Authors vary in their respect for pregnancies in bicornate uteri. Mengert²² writes "although duplication of the generative tract is not uncommon, its obstetrical significance has been greatly overemphasized. It should be remembered that most animals possess double uteri which practically never give rise to dystocia. So also, duplication in the human is a rare cause of dystocia, and most double uteri remain undiagnosed". Smith² who reported 35 cases of double uterus with pregnancy, occurring at the New York Lying-In Hospital from 1899 to 1930, made these five conclusions: (1) fre-

quency, once in 1500 pregnancies, (2) an increased tendency to abortion, (3) a greater liability to premature labor, (4) maternal morbidity and mortality are higher, (5) fetal and infant mortality are higher and (6) the necessity for operative correction has been greatly exaggerated. He had no case of rupture of the uterus and yet the literature is full of them. DeLee²³ says "labor is often normal" and then lists the complications that occur. Titus¹⁸ wrote that "pregnancy in bicornate uterus or uterus didelphys is as serious as that in a tube because of the danger of rupture". Moore⁵ wrote "rupture of the pregnant horn and torsion or incarceration of the nonpregnant horn in the pelvis are the more common abdominal emergencies occurring during pregnancy".

Summary and Conclusions

1. Attention has been called to some of complications occurring during pregnancy and labor. Three case reports have been presented.
2. Bicornate uterus with pregnancy occurs more frequently than commonly realized.
3. Accurate diagnosis is difficult.
4. Pregnancy and labor are frequently normal.
5. Complications are common and dangerous.

BIBLIOGRAPHY

1. Falls, F. H.: A Study of Pregnancy and Parturition in Primiparae with Bicornate Uteri, *Am. J. Obst. & Gynec.* 15:399, 1928.
2. Smith, F. R.: The Significance of Incomplete Fusion of the Mullerian Ducts in Pregnancy and Parturition, with Report on 35 Cases: *Am. J. Obst. & Gynec.* 22:714-728, (Nov.) 1931.
3. Gill, J. J.: Pregnancy in Bicornate Unicollis Uterus with the Child Occupying Both Horns: *Am. J. Obst. & Gynec.* 19:553-554 (April) 1930.
4. Beaver, M. G., and Abbott, K. H.: Normal Pregnancies and Deliveries in Bicornate Uteri, California & West. Med. 47:41-42 (July) 1937.
5. Moore, G. A.: Bicornate Uterus with Report of an Unusual case, *New England J. Med.* 208:887-890 (April) 1933.
6. Aldridge, A. H.: Pregnancy in One Horn of a Bicornate Uterus Following Extirpation of the Other Horn, *Am. J. Obst. & Gynec.* 24:137-140 (July) 1932.
7. Pearson, M. W., and Angier, H. W.: Pregnancy in Bicornate Uterus: Case Report, *New England J. Med.* 214:583-584 (March 19) 1936.
8. Corbett, R. M.: Pregnancy in a Uterus Bicornis, *Brit. M. J.* 2:894 (Dec. 22) 1945.
9. Rogers, M. P., and Blocksom, B. H., Jr.: Pregnancy in Double Uterus, *Illinois M. J.* 76:270-271 (Sept.) 1939.
10. Browne, O'D.: Pregnancy in a Bicornate Uterus, *Irish J. M. Sc.* 165-167 (April) 1938.
11. Moncure, St. L. P.: Anomalies of Generative Organs, with Report of Rather Remarkable Case (Uterus Bicornis

Duplex with Twin Pregnancy). *Virginia M. Monthly*, 66:593-596 (Oct.) 1939.

12. Rowlett, W. M.: *J. Florida M. A.* (July) 1925.

13. Bailey, R. B.: Twin Pregnancy in a Bicornate Uterus, *Proc. Staff Conf. Wheeling Clin.* 9:29 (Feb. 1) 1939.

14. Braze, A.: Bicornate Uterus with Pregnancy in Each Horn, *J. A. M. A.* 123:474-476 (Oct. 23) 1943.

15. Adam, G. S.: Pregnancy Complicated by a Double Uterus; a Report of 2 Cases, *M. J. Australia* 2:649-650 (Dec. 6) 1941.

16. Ritter, S. A.: Case of Bicornate Uterus, with Double Cervix and Double Vagina, *M. Times & Long Island M. J.* 61:373-375 (Dec.) 1933.

17. Robinson, D. W.: Pregnancy in a Uterus Bicornis, *Brit. M. J.* 1:836 (June 1) 1946.

18. Titus, Paul: *Management of Obstetric Difficulties*, St. Louis, The C. V. Mosby Company, 1945, p. 139.

19. Ewer, J. M.: *Genital Anomalies with Pregnancy*, West. J. Surg. 51:94-101 (March) 1943.

20. McDonald, R. E.: Retained Placenta in a Bicornate Uterus, *Minnesota Med.* p. 579 (Sept.) 1927.

21. Michael, W. A.: Pregnancy in Uterus Bicornis Unicollis with the Child Occupying One Horn and the Placental Site a Portion of Both, *Am. J. Obst. and Gynec.* 21:133-135 (Jan.) 1931.

22. Mengert, W. F.: *Postgraduate Obstetrics*, New York, Paul B. Hoeber, Inc., 1947, p. 269.

23. DeLee, J. B.: *The Principles and Practice of Obstetrics*, 1933, p. 559.

DIABETES IN PREGNANCY

JOHN R. MCCAIN, M.D.

and

WILLIAM M. LESTER, M.D.

Atlanta

Diabetes mellitus is one of the serious complications of pregnancy. Prior to the discovery of insulin pregnancy was infrequent, the maternal mortality was about 25 per cent, and the infant loss approximately 50 per cent. By the use of insulin to control diabetes the maternal mortality has been reduced sharply and is now about 2 per cent. The fetal salvage under insulin therapy has improved to a less marked degree. Most investigations have reported a survival of 40 to 70 per cent although some have indicated a stillbirth and neonatal mortality of only 10 to 20 per cent.

Our study is a review of the diabetic pregnancies in a clinic that has not had facilities for close coordination of the obstetric and diabetic services, during a time when no special emphasis was placed upon this complication. These circumstances resemble the limitations experienced by many physicians and obstetricians in their man-

From the Department of Obstetrics of Emory University School of Medicine and Grady Memorial Hospital.

Read before the Medical Association of Georgia in annual session, Savannah, May 12, 1949.

agement of such patients. Our investigation indicates the results that they may expect.

This report is a study of 21 pregnancies, occurring in 20 diabetic patients, that have been delivered at Grady Memorial Hospital under the supervision of our department from July 1932 through December 1948. We have also included 6 diabetic pregnancies of three women that were not delivered on our service. The findings in these two groups are similar and the cases are combined for this review. In addition, we have evaluated 97 pregnancies that occurred in 19 women before their diabetes was diagnosed.

Diabetic Pregnancies

Incidence: One of the most surprising features of our report was revealed as we studied the incidence of this condition. Prior to July 1945 the department of medicine had limited facilities for the management of diabetic out-patients; but since that date the Diabetic Clinic has had more adequate supervision of these cases. Between July 1932 and January 1946 there were only three diabetic pregnancies in approximately 29,000 deliveries. However, concomitant with the improved control of diabetes, pregnancies complicated by this disease have increased. Since January 1946, 18 diabetic patients have been delivered. Fourteen of these were among 10,446 deliveries of colored women, while four were among 3,290 deliveries of white patients.

Diabetic Status: Diabetes mellitus had been diagnosed before the onset of pregnancy in 18 instances. The known duration of the disease before conception varied from one month up to eighteen years. Nine patients were found to be diabetic for the first time during the pregnancy involved, four having the diagnosis established during the admission upon which they delivered. Three of the patients that aborted had no prenatal care, and 7 mothers had no supervision of the diabetes in their antepartum course. The

severity of the diabetes was classified for each pregnancy as suggested by Joslin.¹ The distribution was equal, 9 patients having mild diabetes, 9 moderate, and 9 severe.

Only five of the diabetic mothers were over 35 years of age at the time of their delivery. Nine patients weighed more than 175 pounds, and five of these weighed more than 225 pounds. This was the first pregnancy for 9 of the women.

Antepartum Course: Spontaneous abortions occurred four times. Acidosis was present in 11 pregnancies but no diabetic coma developed. One patient had a mild hypoglycemic reaction, but there was no hypoglycemic shock. Mild polyhydramnios was present in three cases. Serious infections associated with the acidosis complicated the antepartum course of two patients. One of these was an abscess of the thigh, while the other was a severe laryngitis necessitating a tracheotomy. Fetal death apparently occurred at this time in both pregnancies.

Late toxemias developed in 13 pregnancies. Mild preeclampsia accounted for 11 of these cases, one patient had severe preeclampsia, and another one had eclampsia. Four patients had mild essential hypertension, but in only one of these was there a superimposed preeclampsia.

Labor: The onset of labor was at term in 14 pregnancies while in 8 patients it occurred between the thirty third and thirty seventh week of gestation. The premature labor began spontaneously in five of the cases, but three of these delivered macerated fetuses before the thirty sixth week. The three premature labors induced artificially delivered babies that survived.

Breech presentations occurred five times, but only one infant lived. The other four had been dead more than three days before the onset of labor.

Cesarean section was performed for obstetric indications alone. Three pregnancies

were terminated in this manner and the three infants lived. In one case an elective repeat cesarean section was done at thirty seven weeks. The breech presentation that resulted in a living child was delivered by a low cervcial cesarean because of the failure of the frank breech to engage. The third patient was admitted at term in moderately severe acidosis with the membranes ruptured. Intrauterine infection became evident twenty four hours later with temperatures of 101 to 102° F. An unsuccessful attempt was made to stimulate labor by means of a Voorhees' bag. After a latent period of forty eight hours and a fifty two hour labor, with mild acidosis still present, a Porro cesarean section was done. The 4300 gram infant survived, but the mother died of extensive bronchopneumonia and pulmonary edema on the second postoperative day.

Puerperium: Two patients had a septic endometritis postpartum. Three other cases had a temperature elevation of 102° F. on the second postpartum day, the cause of which could not be found. The postoperative death has been discussed.

Results for Infant: The infant mortality for the 27 pregnancies was 55.6 per cent. This total was composed of 4 spontaneous abortions, 7 macerated stillbirths, 2 fetal deaths in labor, and 2 neonatal deaths. Obstetric reasons could be found to account for the loss of 5 of these infants. The mother of one had eclampsia and another patient had severe preeclampsia. Three babies weighed over 10 pounds and their deliveries were

quite difficult.

Factors that complicated the diabetes mellitus may have contributed to the death of many of these infants. These have been summarized in Table 1. All of the 5 patients over 35 years of age lost their infants. One of these mothers had essential hypertension and three others had mild preeclampsia. There were 6 patients under the age of 35 years whose diabetes was of 10 years duration or longer (10 to 18 years). Six infants from the seven pregnancies in these mothers were lost. Eclampsia complicated one case in which the fetus died, and mild preeclampsia occurred in another.

Certain other conditions associated with the diabetes may have increased the hazard to the child. Only two babies survived of the nine born to patients with severe diabetes. The nine obese mothers lost six of their infants. Five of these six pregnancies were complicated by the patients being over 35 years of age or by the diabetes being of 10 years duration. Acidosis may have contributed to the occurrence of fetal death before the onset of labor as it had been present before the delivery of six of the seven macerated fetuses. Late toxemias or acidosis developed in 19 of the pregnancies that went to viability and in five of these cases both conditions were present. Ten of the 11 deaths of viable infants occurred in patients with one or both of these complications.

The infants weighed over 3,650 grams (over 8 pounds) in 13 of the 23 pregnancies

TABLE 1. FETAL RESULTS

Maternal Factors Complicating Results	Number of Cases	Living Babies	Abortions	Macerated Stillbirths	Intrapartum Deaths	Neonatal Deaths	Per Cent Infants Lost
Total Number of Pregnancies.....	27	12	4	7	2	2	55.6
Age: 35 years or older.....	5	0	1	2	0	2	100.0
Diabetes 10 years or longer.....	7	1	2	3	1	0	85.7
Severe diabetes	9	2	1	5	0	1	77.8
Obesity	9	3	3	1	0	2	66.7
Acidosis	11	4	0	6	0	1	63.6
Toxemia	13	7	0	3	1	2	46.2
Acidosis and/or Toxemia.....	19	9	0	7	1	2	52.6

TABLE 2. *PREDIABETIC PREGNANCIES*

Years before Diabetes Diagnosed	Total Pregnancies	Abortions	Stillbirths	Neonatal Deaths	Total Fetal Loss	Per Cent Fetal Loss
1-5 years	30	6	8	2	16	53.3
6-10 years	26	2	5	1	8	30.8
11-15 years	20	3	3	0	6	30.0
16 years and over	21	1	1	1	3	14.3

that went to viability. Five babies weighed less than 2,500 grams. No significant congenital anomalies occurred.

Prediabetic Pregnancies

The prediabetic pregnancies of 19 patients have been reviewed. These mothers had 97 pregnancies before they were diagnosed as being diabetic, and the results of these are summarized in Table 2. The infant did not survive in 34.0 per cent of the cases.

The fetal weight was definitely known in only 18 of the deliveries during the ten years before diabetes was diagnosed. Eleven of these were in the preceding 5 years, and 63.6 per cent of these infants weighed 8 pounds or more. Seven delivered more than 5 years before the diagnosis was established, and none of these babies weighed as much as 8 pounds.

Discussion

The fetal birth weights and the infant mortality rates of the cases of this report were abnormally high prior to the onset of clinical diabetes. For the five years preceding this diagnosis the rates were about the same as those found in diabetic patients. The infant mortality was increased above normal, however, for more than ten years before the diagnosis was made. The results in the prediabetic pregnancies of our study are in agreement with the reports of others.^{2 3}

Until the diabetic patient is fairly well controlled with insulin or by diet alone, the problem of diabetes mellitus as a complication of pregnancy is rare. From 1932 to 1945 the infertility of the diabetic women

being treated at Grady Memorial Hospital suggests that the regulation of their diabetes was not adequate. The incidence of pregnancy increased as soon as the control of the diabetes improved in 1945.

After pregnancy has occurred, the diabetic and obstetric supervision of the patient must be carefully coordinated if an excessive infant mortality is to be prevented. The control of the diabetes and its complications must extend throughout the entire pregnancy. Regulation of these patients is more difficult because of the changes in insulin requirement during pregnancy. In addition, urinary sugar levels become unreliable for determining insulin dosage. This is caused by the frequency with which lactose appears in the urine and by the lowered renal threshold for glucose during pregnancy.

Several factors related to the diabetic status seemed to contribute to the fetal loss. Of the 12 pregnancies in which the mother was over 35 years of age, or in which the diabetic condition had been known to exist for 10 years or more, only one child lived. Conversely, of the 13 pregnancies in which the patient was under 35 years of age and the duration of diabetes was less than 10 years, only 4 infants were lost. Two of these might have lived if the management of their deliveries had been altered, and one of the others was a spontaneous abortion. The significance of the age of the patient and of the duration of the diabetes has been observed by other investigators.^{4 5} The toxemias of pregnancy and diabetic acidosis during the antepartum course appeared to increase the hazards of the infant.

Fetal mortality in diabetic pregnancies increases greatly in the last few weeks before term. Obstetric management attempts to improve the fetal salvage by selecting the most favorable time and manner for the delivery of the child. Our recommendations are similar to those suggested by Eastman.⁶ The patient should be admitted to the hospital for study and control three weeks before the estimated date of confinement. If the cervix is favorable, labor should be induced by rupture of the membranes. If it is not, induction is delayed until it becomes favorable, or the patient is allowed to go into labor spontaneously. Cesarean section is done for obstetric indications. Such factors as obesity, the duration of the diabetes, previous infant loss, or the presence of toxemia may modify the decision as to the time of delivery and the manner by which pregnancy is to be terminated.

Facilities should be available at delivery for the careful supervision of the infant. We lost no babies because of neonatal complications other than those related to the delivery itself, but such deaths have been reported frequently in other studies.

Summary

Twenty seven diabetic pregnancies are reviewed. Twenty one of these occurred among 42,925 deliveries at Grady Memorial Hospital from July 1932 through December 1948. The infant mortality was 55.6 per cent.

The incidence of diabetic pregnancies on our service prior to 1946 was 1 in 9,733 deliveries. After January 1946 the incidence was 1 in 763. The increased fertility of these women began after the control of diabetic patients improved. This control became better in July 1945 when the Diabetic Clinic obtained more adequate facilities for the supervision of diabetic outpatients.

The duration of the diabetes and the age

of the patient seemed to be important factors in influencing fetal survival.

Acidosis or late toxemias of pregnancy developed in 10 of the 11 patients who lost their infants after viability.

The increased fetal mortality in the pregnancies of diabetic women began over 10 years before the clinical evidence of their disease.

REFERENCES

1. Joslin, E. P.; Root, H. J.; White, P.; Marble, A., and Bailey, C. C.: *The Treatment of Diabetes Mellitus*, ed. 8, Philadelphia, Lea and Febiger, 1946, p. 313.
2. Allen, E.: Glycosurias of Pregnancy, *Am. J. Obst. & Gynec.* 38:982-992, 1939.
3. Miller, H. C.; Hurwitz, D., and Kuder, K.: Fetal and Neonatal Mortality in Pregnancies Complicated by Diabetes Mellitus, *J. A. M. A.* 124:271-275, 1944.
4. White, P.: Pregnancy Complicating Diabetes of More Than Twenty Years Duration, *M. Clin. North America* 31:395-405, 1947.
5. Palmer, L. J.; Crampton, J. H., and Barnes, R. H.: Pregnancy in the Diabetic, *West. J. Surg.* 56:175-177, 1948.
6. Eastman, N. J.: Diabetes Mellitus and Pregnancy—a Review, *Obst. & Gynec. Survey* 1:3-31, 1946.

DISCUSSION

Discussion of papers, "Breech Presentation: Is Fetal Extension an Etiologic Factor?" by Drs. Guy L. Calk and Richard Torpin; "Bicornate Uteri: Obstetric Complications," by Dr. T. Schley Gatewood, and "Diabetes in Pregnancy," by Drs. John McCain and William Lester.

DR. EDMUND BRANNEN (Macon): Drs. Calk and Torpin have accepted the challenge of previous investigators who hinted that fetal extension might be an etiologic factor in the causation of breech presentation. They have gone about proving this is true in a very accurate and scientific manner.

There are some practical points that can already be drawn from their paper, and it is to be hoped that in the future, as their investigations continue, other facts may arise that will be of practical benefit.

The most significant thing, as it might be applied to one's daily practice, is this: If ex-rays show a frank breech presentation with full extension of both lower extremities and the head, efforts to do an external podalic version should not be pressed to the utmost, because failure will inevitably result in a certain number of these cases. I presume that does not mean that version should not be tried, but one's efforts should not be forced if version does not occur easily. Perhaps more careful attention should be paid to the fetal heart tones in those cases in which considerable pressure is necessary to bring about a version.

Another factor is that most breeches and most transverse presentations are going to become cephalic presentations by the time the pregnancy enters the last month. Some do not, and this paper shows the principal reason for failure of spontaneous version.

The paper by Dr. Gatewood is a very excellent and complete analysis of the literature and an objective evaluation of his own cases. I would like to mention two cases from my own limited personal experience that are of interest at this point:

One case was seen in an Army general hospital. The patient came in as a sterility problem. For the first time it was found that she had a completely septate vagina. Hysterosalpingograms proved that she also had a completely double uterus. Fallopian tubes were patent. Three months later the septum was removed from the vagina. The woman conceived two months post-operatively and delivered uneventfully and spontaneously at term.

The second case was one that I saw at Grady Hospital, who had had complete failure of fusion of the

vagina and uterus. This patient was interesting in that she had had two normal pregnancies on one side, and when seen at the third pregnancy she was pregnant on the other side. Her labor involving that side of the uterus was essentially a normal primiparous delivery, except that the second stage was somewhat short.

I have also drawn on the experience of Dr. O. R. Thompson, with whom I share offices in Macon. He points out that, on at least three occasions, he has seen patients who had partial vaginal septa. He considers this much more of a complication than those who have complete vaginal septa, in that the head is likely to be arrested by the upper edge of a partial vaginal septum. If such a septum should be discovered prenatally, it would probably be advisable to excise it.

Dr. Thompson now has a patient who has had two cesarean sections for transverse presentation, who is pregnant for the third time and who again has a transverse presentation. She has a partial septum of the uterine cavity. He believes that this partial division of the uterine cavity has caused her three malpresentations. All these fall into the category covered by Dr. Gatewood under the general heading of dystocia.

The paper by Drs. McCain and Lester points out very dramatically the problems that will now be encountered in practice more and more frequently in the "insulin age." Dr. Holloway is going to mention one phase of the treatment of pregnant diabetes that has evolved recently, and I will mention very briefly another phase:

Dr. Priscilla White, in Boston, has shown convincingly that hormonal imbalance may explain increased maternal and fetal mortality, even though the diabetes itself is under very good control. Basic abnormalities are: (1) an increase in chorionic gonadotropin, and (2) a decrease in the serum estrogen. To correct this, she gives graduated doses of intramuscular stilbestrol and progesterone, a series that, given parenterally, costs the patient between \$150 and \$200. Before the patient enters into this expensive routine, she should have studies to see if such therapeutic measures are necessary, because about 25 per cent of diabetic women do not have this hormone imbalance during pregnancy. On the other hand, the oral diethylstilbestrol routine instituted by Drs. Smith and Smith, of Boston, using Lilly and Squibb products, costs about \$70. Practically speaking, therefore, this is a form of treatment that might be used in any diabetic pregnant patient, whether or not the physician has facilities for detailed hormone studies.

DR. G. A. HOLLOWAY, (Atlanta): All three essayists are to be congratulated on their presentation of three interesting obstetric subjects. My comments will be brief, since time only permits a limited discussion.

Drs. Calk's and Torpin's paper is quite interesting and well presented and I sincerely hope they will continue their work and study in trying to determine the etiology of breech presentations, as the overall fetal mortality and maternal morbidity is 2 to 3 times greater in breech deliveries than in cephalic births.

It would be interesting to know if all their frank breech presentations, on x-ray, actually delivered as such. On several occasions I have seen breech presentations at term in the office and have them deliver a cephalic presentation a few days later. Let me say here that I try to convert all breeches to cephalics when found prior to delivery. In primiparas it is a difficult task and is impossible at times.

I'm afraid I can be of little help in formulating any theory or suggesting anything new as to the etiology of breech presentations.

Dr. Gatewood's paper on bicornate uteri is complete and instructive. His review of the literature brings to us the difference in opinion of a large number of outstanding men and their method of handling such abnormal conditions. I'm sure all of us will be more

conscious of this entity after hearing this paper and will be better prepared to handle such cases in the future.

Drs. McCain's and Lester's paper on diabetes in pregnancy is one of the first ever to be presented on this subject at our State meetings. In private practice one does not have the opportunity of seeing many of these cases and we are fortunate in having such a paper to enlighten us on such an important subject. The most interesting work and best results obtained in the last few years, relative to improving our overall care of diabetes complicating pregnancy, is that of Dr. Priscilla White and Drs. Smith and Smith of Brookline, Mass.

Drs. Smith and Smith have done most of the experimental work along these lines and have published a most enlightening article, "Diethylstilbestrol in Pregnancy" in the *Obst. and Gynec. Journal*, November, 1948 issue. I would recommend this to all doctors who do obstetrics.

In 1941 Drs. Smith and Smith summarized their findings on estrogen and progesterone metabolism in women, and concluded from their results that estrogen oxidation products rather than estrogen per se were responsible for the progesterone stimulating effect of estrogen, through pituitary stimulation in the non-pregnant women, and through causing an increased utilization of chorionic gonadotropin in pregnancy. It was also found that diethylstilbestrol, unlike the natural occurring estrogens, was not depressed in its pituitary stimulating effects by the presence of progesterone and might theoretically provide an ideal agent from preventing progesterone deficiency in pregnancy. Therefore, they state, the concept seems tenable that stilbestrol causes an increased secretion of progesterone in human pregnancies (probably by the placental syncytium) through causing increased utilization of chorionic gonadotropin. An important part of the understanding of this concept is the realization that stilbestrol is given not because it is estrogenic but because it stimulates the secretion of estrogen and progesterone.

The dosage schedule proposed by the Smiths is based upon their quantitative determination of hormonal levels throughout normal pregnancy and is planned to approximate physiologic condition as closely as possible; 5 mg. daily by mouth is started during the 6th week (counting from the start of the last period). The dosage is increased by 5 mg. at two week intervals to the 15th week when 25 mg. is taken daily. Thereafter the daily dose is increased by 5 mg. at weekly intervals. Administration is discontinued at the end of the 35th week since a drop in estrogen and progesterone normally precedes the onset of labor.

Their results on 11 patients, all classified as severe diabetes, with this form of therapy, were as follows: Three patients were primiparas, the other eight multiparas, had previous obstetric complications in 13 previous pregnancies as toxemia, intrauterine death or prematurity. Only 2 of the 13 previous pregnancies resulted in living babies. There were only 3 fetal deaths in this series of 11 patients treated with stilbestrol but only one of these could be considered a failure. This was a spontaneous delivery at 26 weeks. The other two deaths were due to placenta praevia, and an Rh negative patient induced at the 37th week due to a rising anti-Rh titer. There were no toxemias in these 11 cases.

Their series of 11 cases is too small to warrant any conclusion concerning the value of stilbestrol as a preventive measure in pregnancy complicated by diabetes, but it is hoped it will be given a trial by more clinics in the future.

In closing, I would like to leave with you a quotation of Dr. Randall's from the Mayo Clinic, who says, "As in all obstetric conditions, a careful study of all factors involved in a given case should lead to proper selection of treatment. There is and will continue

to be difference of opinion in regard to the delivery of diabetic women."

DR. JOHN R. McCAIN (closing): The review of our experience with diabetes mellitus in pregnancy was begun in January 1949 because of the change in our program of treatment of these patients that Dr. Hollo-way just mentioned. Frankly, we were amazed at our poor results with the pregnancies of these women. We had felt that our supervision of these cases had been adequate, but when we actually analyzed our results we found that our management had been poor and that our results were even worse. It is our impression that most physicians will have the same unpleasant surprise if they tabulate their results, unless they have given very careful attention to the diabetes and to the pregnancy.

Specific treatment of the pregnancies of these patients involves three possibilities: (1) the administration of estrogens, or of estrogens and progesterone, during pregnancy to prevent an imbalance of hormones that might develop; (2) the premature interruption of the pregnancy about three weeks before term; and (3) the use of cesarean section as the means of this early termination of pregnancy. The results obtained from any, or from all, of these methods of treatment will be modified by other conditions in the patient. Our study seems to indicate that the hazards to the pregnancy of the diabetic patient are increased if the women is over 35 years of age, or if the duration of the diabetes is 10 years or longer.

CLINICAL IMPRESSIONS OF SOME OF THE NEWER ANALGESIC AGENTS

JOHN M. BROWN, M.D.

and

PERRY P. VOLPITTO, M.D.

Augusta

Progress in the therapy of pain within recent years has resulted largely from investigations into two previously unexplored and, consequently, unappreciated sources of information related to analgesia. First, new clinical research technics¹ have yielded additional information on the pathways, origins, and types of pain that are observed from day to day. Second, a systematic study of the "naturally-occurring" chemical compounds from their chemical and pharmacological points of view has resulted in the synthesis of several agents which may prove to be *more desirable*² than the original plant alkaloids themselves.³ Until this information is correlated through extensive and

well-controlled clinical study in man, the final evaluation of a particular agent in the therapy of a particular type of pain cannot be accurately stated. A study of this type, utilizing several of the newer analgesic agents, was begun approximately one year ago at the University Hospital under the direction of the Department of Anesthesiology.

Three series of chemical compounds have yielded synthetic derivatives which warrant clinical trial in man after preliminary animal experimentation: the Morphine series, the Isonipecaïne series, and the Methadone series.

First, by chemically rearranging the groups on the piperidine structure of the morphine molecule, dilaudid (Dihydromorphinone), dicodid (Dihydrocodeinone), and metopon (Methyldihydromorphinone) result.

Dilaudid

Dilaudid has four times the analgesic potency of morphine, the average adult dosage ranging from 2-4 mg. It can be administered orally, parenterally, or by suppository. Since it is four times as somnifacient as morphine, comparable analgesic dosages are accompanied by almost the same degree of hypnosis. The margin of safety appears to be no greater than that of morphine, and no clinical difference can be established in the respiratory-depressant effects of these two agents in therapeutic dosages. The cough reflex is obtunded. Undesirable side actions seem to occur less frequently with dilaudid, yet addiction and tolerance develop with about the same frequency as with morphine. This is because the duration of analgesia with dilaudid is somewhat shorter, thus necessitating more frequent administrations.⁴ The gastro-intestinal (constipating) actions of dilaudid are not so pronounced as with comparable analgesic dosages of morphine.

From the Department of Anesthesiology, University of Georgia School of Medicine, Augusta.

Read before the Medical Association of Georgia in annual session, Savannah, May 12, 1949.

Dicodid

Dicodid (Hycodan) is an excellent antitussive agent only recently introduced into this country. It is a more potent analgesic agent than codeine, and the tendency towards addiction and tolerance is greater than with codeine. Comparable side actions are found in these two drugs. Clinically, its principal use is for obtundation of the cough reflex (2.5 mg. hypodermically or in a palatable elixir).

Metopon

Metopon, an expensive and difficult drug to synthesize, has been limited in its usage to the relief of pain in incurable cancer by the Committee on Drug Addiction of the National Research Council. It exhibits an exaggerated analgesic effectiveness, and a diminution of sedative, euphoric, emetic, and intestinal actions, when compared with morphine.⁵ It may be given orally. Addiction and tolerance seem to develop more slowly than with morphine. The administration of 3-9 mg. doses of metopon in patients with chronic, severe types of pain will produce adequate pain relief for months instead of the usual weeks or days possible with other agents.⁶

Eisleb and Schumann⁷ added a second series of analgesic agents to our armamentarium with their synthesis of isonipecaine in 1939. Chemical rearrangement of certain groups in the parent compound gives, in addition to isonipecaine itself, two other promising agents, Bemidone and NU 718.

Isonipecaine

Isonipecaine (Demerol, Dolantin, Meperidine) exhibits three distinct pharmacologic actions: analgesia, hypnosis, and spasmolysis. 100 mg. has the analgesic potency of 10 mg. of morphine,⁸ with a somewhat shorter length of action (3 hours). Clinically, it does not depress either the cough reflex or respiration to the extent that morphine does even when administered in com-

parable analgesic quantities. The sedative-hypnotic properties are comparable to morphine, and when combined with scopolamine in obstetrics one can obtain analgesia, amnesia, and adequate sedation in a significant number of maternal patients. The incidence of fetal apnea is low.⁹

Isonipecaine is the analgesic agent of choice in urinary and ano-rectal conditions where smooth muscle spasm is an etiological factor in the pain. A spasmolytic and slight antihistamine action¹⁰ benefit some asthmatic patients.

Bemidone

The m-hydroxyphenyl analog of isonipecaine shows promise as an analgesic agent. Its possibilities have not been explored thoroughly from a clinical standpoint at this time.

NU 718

A slight shift in the C-O linkage of isonipecaine results in a compound which is apparently 30 times as potent as demerol from preliminary animal experimentation. Clinical evaluation is not complete at this time.

The third, and most recent, series of analgesic compounds to attract attention are the methadones and their analogs. Metadone itself (6-Dimethylamino-4, 4-Diphenyl-3-Heptanone), dl, isomethadone (dl, 6-Dimethylamino-4, 4-Diphenyl-5-Methyl-3-Hexanone), l, isomethadone (l, 6-Dimethylamino-4, Diphenyl-5-Methyl-3-Hexanone), and CB-11 (Heptazone) (dl, 4, 4-Diphenyl-6-Morpholinoheptanone-3), have been employed in clinical studies at this institution.

Methadone

Methadone, by weight, seems to possess an analgesic potency somewhere near that of morphine, although earlier clinical trial showed more enthusiasm.¹¹ This agent lacks the sedative-hypnotic qualities of morphine with small administrations, but possesses

this quality whenever larger dosage is necessary for pain relief. The respiration is not depressed clinically until 20-30 mg. are employed. A central vagal action¹² slows the heart and stimulates peristalsis of the gastro-intestinal tract in animal experiments. The administration of 30 mg. or more stimulates the vomiting center directly in a significant number of cases. Hyperglycemia and hypothermia have been observed in patients receiving metadone for analgesia. Oral administration is not as effective as parenteral administration, yet, after a slight local anesthetic action, the drug may produce secondary irritation upon subcutaneous injection. Tolerance will develop and addiction has been reported; however, the incidence of addiction is probably less than with morphine. Methadone has been successfully employed in the treatment of withdrawal symptoms in morphine addiction.¹³ A dosage of 5-10 mg. usually suppresses mild to moderate pain; 10-20 mg. are necessary for adequate relief in severe pain.

Some of the disappointing results attributed to methadone, especially when smaller doses are administered for pain relief, can be explained by the fact that some patients need analgesia plus psychic sedation. This is a poor agent to choose for such patients; however, the addition of a hypnotic agent (a short acting barbiturate) will result in satisfaction. Only a slight euphoria is experienced with methadone.

dl, Isomethadone

This racemic mixture of the optical isomers of a hydrolysis product of methadone has been given clinical trial as an analgesic agent. Clinically, it has proven to have an analgesic potency slightly greater than codeine, with minimal respiratory depression. The cough reflex is depressed only slightly with an administration of 30 mg. Side actions become much more frequent, espe-

cially in elderly individuals, whenever the dosage exceeds 20 mg., and sedation is noted in a greater percentage of cases whenever one exceeds 15 mg. The drug may be administered orally or parenterally in a dosage of 10-30 mg. This agent is controlled by restrictions of the Harrison Narcotic Law, although tolerance and addiction potentialities have not yet been established. Clinically, it may be employed for the control of mild pain in adults who are ambulatory.

l, Isomethadone

Experimentally, the levo optically-active isomer of isomethadone has proven to be 50 times as potent as the d-form with relation to analgesia. The respiratory depression of this agent is comparable to morphine, clinically. The levo-rotary form has a wider margin of safety than the dextro-rotary form in animal experiments. Overdosage produces a protracted prostration and slow death rather than convulsive phenomena observed in toxicity studies of some of the other methadones. The cough reflex is depressed to some degree whenever analgesic dosage is employed. The sedative-hypnotic effect is less than that observed with a comparable dosage of morphine, and the number of side effects is significantly reduced in comparison with morphine. This agent may be administered orally or parenterally in a dosage of 7.5-15 mg. Tolerance and addiction potentialities have not been definitely established. Clinically, l, isomethadone may be employed for pain relief in patients postoperatively who do not need a great amount of psychic sedation. In these patients, the incidence of constipation is definitely decreased over those in whom morphine is employed.

CB-11 (Heptazone)

Heptazone approaches codeine clinically in analgesic potency, with minimal respiratory depression in the adult. Side actions

are present with amounts above 15 mg., comparable to dl, isomethadone. The cough reflex is not noticeably depressed with this dosage. Administration by oral or parenteral routes is possible. The dosage is 10-20 mg. for the relief of mild to moderate pain. Tolerance and addiction potentialities have not been established.

Summary

We have listed our impressions of several of the newer analgesic agents. Clinically, dilaudid offers little advantage over morphine; dicodid is a potent antitussive agent; metopon is an excellent analgesic agent with little sedative effect. IsonipECAINE offers analgesia, hypnosis, and spasmolysis. The methadones produce less euphoria and sedative-hypnotic qualities than other synthetics. Of these, l, isomethadone is the most potent analgesic agent that we have employed from the methadone series.

BIBLIOGRAPHY

1. Pfeiffer, Carl C.; Sonnenschein, R.; Glassman, L.; Jenney, E. H., and Bogalub, S.: Experimental Methods for Studying Analgesia, Ann. New York Acad. Sc. 51:21 (Nov. 1) 1948.
2. Batterman, R. C., and Oshlag, A. M.: The Effectiveness and Toxicity of Methadon, a New Analgesic Agent, Anesthesiology 10:220 (March) 1949.
3. Tainter, M. L.: Pain, Ann. New York Acad. Sc. 51:10 (Nov. 1) 1948.
4. Goodman, L., and Gilman, A.: The Pharmacological Basis of Therapeutics, New York, The Macmillan Company, 1947, p. 207.
5. Eddy, Nathan B.: Metopon Hydrochloride, J. A. M. A. 137:365 (May 22) 1947.
6. Editorials, Metopon Hydrochloride, J. A. M. A. 134:291 (May 17) 1947.
7. Eisleb, O., and Schaumann, O.: Dolantin, ein Neuartiges Spasmolytikum und Analgetikum (Chemisches und Pharmakologisches), Deutsche med. Wchnschr. 65:967 (June 16) 1939.
8. Batterman, R. C.: The Clinical Effectiveness and Safety of a New Synthetic Analgesic Drug, Demerol, Arch. Int. Med. 71:345-356 (March) 1943.
9. Brown, J. M.; Volpitto, P. P., and Torpin, R.: Intravenous Demerol-Scopolamine Amnesia During Labor, Anesthesiology 10:15-24 (Jan.) 1949.
10. Yonkman, F. C.: Pharmacology of Demerol and its Analogues, Ann. New York Acad. Sc. 51:61-62 (Nov. 1) 1948.
11. Isbell, H.; Eiseman, A. J.; Wikler, A., and Frank, K.: The Effects of Single Doses of Methadon on Human Subjects, J. Pharmacol. & Exper. Therap. 92:83 (Jan.) 1948.
12. Scott, C. C., and Chen, K. K.: The Action of 4, 4-diphenyl-6-Dimethylamino-Heptanone-3 Hcl, A Potent Analgesic Agent, J. Pharmacol. & Exper. Therap. 87:66 (May) 1946.
13. Vogel, V. H.; Isbell, Harris, and Chapman, K. W.: Present Status of Narcotic Addiction, J. A. M. A. 138:1019-1026 (Dec. 4) 1948.

VETERANS' NEWS

The Veterans Administration hospital in Danville, Illinois, converted porches of ward buildings into gymnasiums for patients. Porch space has proved adequate for rowing machines, stationary bicycles, punching bags and basketball goals and backboards.

* * *

We cannot expect physical signs to help us very much where early meningitis is suspected. W. S. Craig, M.D., Brit. M. J., August. 1948.

THE EYE IN THE ADVANCING YEARS

MORGAN B. RAIFORD, M.D.

Atlanta

The eyes begin their aging processes throughout the entire orbit at the latter portion of the fourth decade of life. In fact, the ophthalmic system changes up to the eighteenth year. These changes are physiological to maturity and are not considered those of senescence. As the patients approach the late thirties they notice then the first limitation of their visual ranges and flexibilities. The discussion here will include the major changes that usually occur in the eye, beginning at the fourth decade of life, with notations of how some of the important disorders are recognized and how they influence or disrupt our system of vision.

I. CHANGES IN VISUAL ACUITY

a. Influence of the Endocrine Secretion—

Some of the most obscure symptoms of the menopausal and male climacteric syndrome are their related imbalances in the patient's vision. These patients are at the age where their first glasses are usually fitted and in many cases it is their first experience that they have had with an aid to previously existing normal vision. These imbalances, mainly of the sympathetic and parasympathetic nervous mechanics, manifest themselves ophthalmologically in an instability of accommodation and convergence. This is in addition to the expected changes of this age level. In these cases, after completing the refraction of the patient, one must duly regard the necessity of controlling the menopausal syndrome with proper estrogenic therapy. This stabilization of the patient's nervous system will enable the process of convergence and accommodation, which is most noticeable in near vision, to be restored to their proper

physiological balance. Findings here are as important from the patient's history as they are from the examination itself. The female patient usually elicits a clearer history of such imbalances than does the male climacteric. However, their responses to their respective therapies are just as gratifying.

b. Metabolic Disorders—Early symptoms of diabetes are changes in the patient's refraction variability. Vision and glasses that are proper at one period will a few days later be noticed to be blurred. This will be detected medically by the patient's history as well as by the laboratory findings. It is not, however, a true disorder of advancing years but many times these diabetic symptoms are seen in the later years of life.

Arteriosclerotic changes of the fundi producing circulatory embarrassment in the region of the macula will be noted in the early cases as changes in size and shape of images and a distortion of their previous normal relationships. Here the effects of poor blood supply may impair the visual acuity permanently.

c. Metabolism of Lens—The lens grows throughout life with an increase of as much as one millimeter in diameter and in thickness. The cuboidal cells are flattened on the anterior lens capsule by the pressure of the enlarging lens, which is associated with a hydrolysis of the lens protein. Slow calcification is attributed to the combination of the positive charged calcium in the lens with the negative phosphate ions to precipitate an insoluble calcium phosphate. The lens gradually become more opaque with the end result being that of cataract formation. The existing cataract, whatever its density, should be individualized. There are no known methods of treatment that can cause the absorption of the true lenticular opacities.

The term that we hear frequently used by elderly people is that their vision has

improved and that they now have "second sight." This improvement of visual acuity is brought about by changes within the lens due to its disturbed metabolism which by its enlargement has caused an increase in its optical power so that the patient can read without glasses. This improvement in vision gives the patient a sense of false security that in some cases may lead to an increase in intra-ocular tension so as to create glaucoma. These signs and symptoms should be duly regarded and a thorough examination should be carried out with proper treatment as indicated for that particular case.

d. Sudden Loss of Vision—The patient may awake in the morning and notice that the vision has been greatly reduced as compared to that of the day before. Usually this is of vascular origin which has been brought about by a thrombosis of the central retinal artery or one of its branches. Variation from the total loss of vision occurs in branches of the retinal arteries of the fundus which results in their respective segmental or quadrant loss of the field of vision. Sclerosis with atheromatous plaques of the blood vessels invite such thrombi to occur, as part of an over-all systemic picture.

The treatment of this condition is most favorable in its earliest stages. The sooner the patient has therapy, the greater his chance of recovery. Dicumarol to reduce the coagulability of the blood with that level retained to lower the congestion of the posterior segment of the eye aids considerably in this condition. Delaying action here practically eliminates the chance for any improvement.

II. LIDS

a. Ptosis—Physiologic ptosis of the lids with its relative enophthalmos is due to the absorption of fat within the orbital area. There may also be some loss of tone of the levator muscles. Any sudden drooping of

the lids should be examined for lesions in the oculomotor nerves. If unilateral, lesions along the nerve pathways should be considered.

b. Xanthomata—Xanthomata frequently occur on the lids of the aged. This is a disturbance of the cholesterol metabolism. They may be removed surgically if they appear to be causing any apparent impairment or cosmetic blemish. They do not have the faculty of becoming malignant.

c. Ectropion and Entropion—Ectropion occurs mostly along the inner half of the lower lids and is brought about by relaxation of the orbicularis muscle and the fibrous tissue of the lid and with deformities of the tarsal plate. There is a loss of proximity of the upper and lower lacrimal punctum that greatly impairs the egress of tears. Entropion with its turning in of the margin of the lower lid enables the eye lashes to rub against the cornea which leads to the formation of ulcerations and scarification of its epithelium. This latter condition can be enhanced by spastic contraction of the orbicularis muscles and contractions of the lower tarsal plate. Treatment for these conditions is cauterization by the Ziegler technique, or surgical repair at the anterior angle of the lid. At the proper level suture techniques may be used but with less satisfactory results. If trichiasis exists these distorted cilia are best permanently removed by the use of fine electrocauterization.

d. Tumors of the Lids—Epithelial and basal cell carcinoma are frequently seen in the area of the eye lids. These growths are insidious and are considered, by the patients, as of little importance. Even with their spread, their seriousness is discounted. Any abnormal growth on the eye lid should be biopsied and if found to be malignant should be excised with the proper plastic repair and radiation therapy. It is very important that these lesions should be detected

as early as possible as the magnitude of the surgery will be reduced as well as the period of radiation therapy, thus resulting in a better functional and cosmetic appearance.

e. Blepharochalasis—There is a fat deposit of the upper lid with senile atrophy of the fibrous tissues and usually a weakness of the levator muscle. A heaviness of the eyes resulting in an inability to raise the upper lids properly occurs and this is greater in its outer half. Chronic infections and myasthenia gravis should be excluded. Excision of the excess tissues is the best treatment. However, cauterization may be utilized if the volume of tissue is small.

f. Lacrimal Apparatus—The lacrimal punctum are usually everted or inverted in the advancing years. They may be elevated as to their relation to the lid margin with accompanying stenosis. Along with this there is a retarded function of the lacrimal gland which contributes to a dryness of the conjunctiva. A chronic blepharitis results which has an accompanying tearing of the eye. This is an annoying symptom and it may be corrected by dilatation of the lacrimal punctum with reduction of its elevation along the lid margin. Lock's solution (0.7 per cent gelatin in 0.35 per cent saline) may be substituted for the normal tears by being used as an irrigation every three to four hours during the day. The blepharitis may be combated in addition by the use of:

Sodium chloride 0.5 Gm.
Sodium bicarbonate 0.3 Gm.
Dist. water 240 cc.

Use in a warm solution. This is an excellent solvent for the crusts and exudates that form in this condition.

III. CONJUNCTIVA

Pinguecula are the yellow deposits that usually occur as the result of fatty infiltration and is greater at the inner half of the bulbar conjunctiva. Sclerosis with deposition of calcium salts may accompany this which in itself creates a low grade irritation in the conjunctiva. These may be excised

if their cosmetic blemish is indicated. The angular conjunctivitis seen often in the spring and fall of the year is usually the Morax-Axenfeld diplobacillus. This is usually seen after the conjunctivitis has extended throughout, with symptoms of itching, irritation, and morning deposits of mucoid material at the inner canthi. A 0.5 per cent solution of zinc sulfate in a buffered solution is specific here. For mild conjunctivitis which may be brought about by irritation and exposure. Tr. Opii 10 cc., aqua dist. 10 cc., gtt. i q2h O. U. is used to combat this annoyance.

IV. CORNEA

Cornea sensitivity decreases after the fifth decade of life, with a loss of lustre and a flattening of the corneal surface which creates an astigmatism. The arcus senilis (gerontoxon) along its periphery has an infiltration of fat globules into the substantia propria. This does not impair the vision or extend toward the center of the cornea. Pigments from the iris may adhere to the endothelium of the cornea and may be observed with a corneal microscope. This is usually on the lower half of the corneal endothelium and does not affect the vision.

V. IRIS

There is a disappearance of the pigment epithelium of the pupillary margin with an ill defined border of whitish color due to hyalinization. This fibrous replacement gives rise to senile myosis and rigidity of the pupil. The dilator fibers also undergo hyalinization which makes it difficult for the pupil to be dilated. There is some proliferation of pigments of epithelium of the iris which may migrate into patches and create areas that can be confused with melanoma. There may be sufficient pigments in the iris angle so as to establish a secondary glaucoma.

VI. LENS

"Second sight" beguiles its possessor into believing that there is an improvement of

his visual acuity when it is actually a prodromal finding of cataract formation. The changes of the lens brought about by a disturbance of metabolism with hardening of the nucleus of the lens will create distortion of vision and with the increase of these densities will cause the vision to become impaired all together. The maturity of the lens varies as to its rapidity of metabolic disturbance. To wait for a cataract to fully develop is limiting the patient's ability by allowing poor vision and impairment of one's activities. The criteria for cataract removal are social, economical, and occupational impairments. With modern techniques and improvements of this operation, delay for the formation of a dense lens has little or no foundation. Vitamin therapy, electrotherapy, stimulating drugs, and local medicants to increase the blood supply have no practical therapeutic value. Medical treatment will not cause absorption of true lenticular opacities.

VII. THE FUNDUS

a. Vitreous—Within the vitreous body deposits of iris pigment may create floating opacities and fibrilla or threads which are part of senile changes. The patient notices these as shadows in front of his field of vision and they are a source of annoyance to the patient. They move fairly rapidly on excursions of the eyes as the vitreous loses its gel characteristics and becomes more fluid. Hard particles may float about and are observed as "cotton balls." These particles are calcium soaps of fatty acids and usually do not create noticeable reduction of vision. Explanation of these impairments should be made to the patients as it is necessary with our present knowledge that they should learn to live with them.

b. Retina and Choroid—The retina becomes less transparent due to fibrous changes of the limiting membranes with atrophy in its periphery which causes a decrease of its nerve fiber and ganglion cells.

A cystoid degeneration in the rods of the cones is present which as a rule is first greater on the temporal side. In the macular region one first notices a conglomeration of whitish particles of minute spots which are of excrescences on the Bruch's membrane. These do not change one's visual acuity to any marked degree but cause impairment of the blood supply of the retina. Here is the direct agent that is responsible for the greatest impairment of its optical properties. The small blood vessels of the chorio-capillaris in the choroid layer show considerable proliferation of the intimal-arteriosclerotic changes with subsequent disorganization and atrophy. This loss of blood supply is the greatest agent in visual loss of the aged. The retinal blood vessels themselves present a picture of arteriosclerosis giving rise to "silver wire arteries," their visible walls, localized constriction, plaques in the lumen, and with resultant hemorrhages and exudates that are part of the aging process.

VIII. OPTIC NERVE

Sclerotic changes in the blood vessels of the pia-arachnoid sheath produce irregular atrophic areas of the optic nerve. These changes manifest themselves in a variation of qualities and quantities of vision that can be detected by perimetry under controlled illumination. The appearance of the optic nerve in the retina will vary from its normal pinkish tinge to a pallor which can be evidence of other pathological lesions other than that of sclerotic changes. Glaucoma, the optic atrophies, syphilis, those of intracranial lesions, and exogenous toxins, will create similar clinical findings.

IX. INCREASED INTRA-OCULAR PRESSURE

The normal intra-ocular tension is from 15 to 25 millimeters. The normal tension range will vary during the day fluctuating 10 to 12 millimeters. Increased intra-ocular tension should be immediately investigated and given a thorough evaluation. Glaucoma

is responsible for about 11 per cent of all of the blindness in this country. It may be primary glaucoma of which the origin is still vague, or it may be secondary glaucoma which is caused by a known agent or some related disease. The presence of inflammation, intra-orbital tumors, and hemorrhages, must be ruled out. The taking of a tension by palpation should be a part of every routine physical examination. A delay in proper therapy is to destroy the vision and its importance can not be over estimated. Medical therapy with the accurate control of tension is an ideal seldom achieved by the physician. Surgical measures are our most reliable answers to this formidable disease. The patient should be followed frequently with regularly taken visual fields and tensions. They should be made aware of the seriousness of the condition. Early detection and therapy are our best control of this debilitating disorder.

BIBLIOGRAPHY

1. Bellows, J. G.: Senile Exfoliation of Lens Capsule, *Quart. Bull., Northwestern Univ. M. School*, no. 3, 18:232, 1944.
2. Berens, Conrad: *The Aging Eye*, no. 16, New York Med. 2:13-16 (Aug. 20) 1946.
3. Berens, Conrad: *Aging Process in Eye and Adnexa*, *Arch. Ophth.* no. 2, 29:171 (Feb.) 1943.
4. Frandsen: Riboflavin and Ariboflavinosis with Special Reference to Eye Changes, *Acta Ophth.* 19:331, 1941.
5. Grant, Hendrie W.: *Eye Problems in the Aged*, *Lancet* 64:199 (June) 1944.
6. Parsons, Sir John: *Eye Diseases in Elderly Patients*, *Practitioner* 150:329 (June) 1943.
7. Raiford, M. B.: *Endocrine Imbalances in Ophthalmology*, 4th District Med. Soc. Virginia (April) 1944.
8. Kones, Benjamin: *Senile Changes and Degeneration of the Human Eye*, no. 3, *Am. J. Ophth.* 21:239 (March) 1938.
9. Rutherford, C. W.: *Gerontology and the Eye*, With Some Remarks of Old Age, *Indiana M. J.* no. 5, 39:209 (May) 1946.
10. Smith, C. Souter: *Problems of the Eyes in the Aged*, *J. Missouri M. A.* 40:30, 1943.
11. Stern, Milton: *Ophthalmic Geriatrics*, Kentucky M. J. 43:202, 1945.
12. Tyrrell, T. M.: *Affections of the Eyes in Old Age*, *M. Press & Circular*, p. 322 (Oct. 18) 1939.
13. Van der Heydt, Robert: *Visual Prognosis for the Aging Lens*, *Am. J. Ophth.* no. 3, 25:576, 1942.

HEALTH ASPECTS OF TELEVISION

That television is here to stay cannot be denied, for the development of such a powerful medium not only for entertainment but for education cannot be retarded. What are the health aspects of television, The Educational Committee of the Illinois State Medical Society, in a *Health Talk*, says frankly it doesn't know, even though it sponsors a weekly telecast on health education.

Since "eye strain" seems a complaint commonly made by adults and children following a prolonged session with the television screen, attention must be directed to the factors involved in the complaint. These would include the clarity of the screen image, the avoidance of flickering, and certainly the angle from

which the viewer is watching the screen. These factors are also a consideration for any other medium, whether it be the watching a multi-colored jig saw puzzle or a motion picture.

Dr. Benjamin Renes in *Sight-Saving Review* stated that watching television may cause people to receive needed eye care more promptly, for if a fatigue is noticed it will cause the individual to seek medical attention earlier and, in a number of cases, allow serious eye diseases to be discovered at a more favorable time than would otherwise be the case.

Dr. Derrick Vail in the *Illinois Medical Journal* reveals that when movies were first invented people were fearful of their effect on the eyes. As the technical aspects were developed, flickering was controlled, and ophthalmologists generally concurred that proper viewing was not harmful to the eyes. Today, Dr. Vail points out, television had led to the same situation. The ophthalmologist and the family physician are daily questioned about whether or not harm to the eyes can come from viewing it. As the novelty wears off and improvements come, these fears too are gradually disappearing. It is safe to say that no organic ocular disease can be attributed to the television habit. The *Journal of the American Medical Association* recently gave the following helpful hints: (1) television in itself does not produce eyestrain; however, since it requires the utilization of all the important components of the visual act, such as convergence, accommodation and fusion, patients often complain of fatigue after relatively short periods; this is particularly true if there are any defects of any of the mentioned mechanisms; (2) in general, a large screen is considered to be better than a small one, because it allows clearer vision at a greater distance and gives a larger visual angle; (3) a distance of ten feet or more would, in general, be better than a short distance, provided the size of screen and room would permit; (4) the nearer perpendicular, the better; too much of an angle produces distortion and makes fusion difficult; (5) there is not a definite time limit; however, some discretion should be used, and it should not be persisted in beyond the point of fatigue; (6) daylight screens, in general, are considered to be better because they are compatible with more light in the room, thus reducing the contrast between screen and surrounding objects.

Television as a teaching instrument offers great potentialities—it combines sound, action and realism. The medical profession is using it not only for providing health education to public viewers, but for teaching surgical technics to its own profession. These surgical telecasts have more recently been produced in color. As the baby television grows, its health aspects will be closely studied by the medical profession.

UNDERSTANDING THE NEW BABY

The advent of the first child poses many problems to the parents. Awkwardness and the fear of doing the wrong thing in handling the child are replaced almost overnight by the natural instinct of parenthood, the Educational Committee of the Illinois State Medical Society points out in a *Health Talk*.

Babies as a rule are very well put together and will stand considerable mauling. Handling the infant like a piece of china is not necessary. Holding the child firmly, supporting his back and head and moving him slowly are essential. To move the child quickly gives it a feeling of loss of support and tends to frighten it. In turning the baby over, it is wise to take the arm nearest you and the leg farthest away. In this manner the baby can be rolled toward you and so into your arms.

Many mothers wonder about the shape of the head. While there are many causes for variations in shapes of the head, the mother can see to it that the baby's position in the crib is turned often enough to help

mold the head properly. An infant's head increases in circumference about one inch a month during the first two or three months. Since all the small bones have not united, pressure and position are great factors.

If the baby is in a crib next to the wall it will naturally attempt to turn toward the noises in the room. The wise mother will either turn the crib around or turn the baby around periodically, giving the baby an incentive to change its pressure points.

Shortly after birth, the eyes often water and discharge. This is most commonly due to a chemical irritation from the medicine that is put into every baby's eyes as soon as it is born, in compliance with a state law. Sometimes one eye will water. This is frequently caused by the plugging of the small duct that drains the tears and secretions from the eye to the nose. The opening of this little duct is in the edge of the lower lid in the corner of the eye. In most instances this can be corrected by pressing gently with the small finger in the corner of the eye toward the nose. The light pressure helps clear the duct, but if the tearing persists, the physician should be consulted.

Some babies are born with teeth, but this is very rare. What some mothers think are teeth are little pear-like spots that may appear in the gum. These are merely small hard collections of cells that will cause no harm and will disappear naturally in time.

There are mothers who complain that their babies take all their formula very quickly at times only to nurse for several minutes at other times without getting his food. After the baby has taken some of the food a vacuum may be created in the bottle which will prevent the milk from flowing freely. It is therefore wise to take the nipple out of the baby's mouth at frequent intervals to see that the nipple holes are not plugged. A good procedure is to keep a large needle in a cork, sterilize over a flame and pierce the hole if necessary so that the milk will flow freely. Normally the baby should get his full feeding in ten or fifteen minutes, and even in a shorter time.

All new babies should be given affection in large doses. They need it as much as they do food. A normal baby cries because it is uncomfortable or hungry and a mother should never hesitate to pick up her crying baby and cuddle it. With much common sense and judicious affection, a new baby will take its rightful place in the home.

PARENTS SHOULD BE ALERT TO SYMPTOMS OF DIABETES IN CHILDREN

Parents often do not recognize excessive thirst, loss of weight, and easy fatigue as symptoms of early diabetes in children, points out a Michigan pediatrician.

Writing in *Hygeia*, health magazine of the American Medical Association, Dr. Lewis J. Burch of Mount Pleasant and his daughter, Isabella C. Miller, say that the duration of minor symptoms of the disease is rarely more than four or five months in children.

Because parents do not realize the significance of these minor symptoms, the disease frequently is disregarded until vomiting, severe abdominal pains, and other critical signs appear.

Although diabetes runs in families, there have been many cases in which it has appeared in families where there was no known history of the condition, the article says. These cases may have come from parents who are carriers but who do not have the disease themselves.

To detect diabetes, the doctor makes a urinalysis and a blood sugar test. But since other diseases can cause symptoms similar to those of diabetes, only the glucose tolerance of fasting blood sugar test can be relied upon as conclusive.

The Medical Association of Georgia will hold its 1950 annual session in Macon, April 18-21.

INTEGRATED HOSPITAL SERVICE

TULLY T. BLALOCK, M.D., *Chairman.*

Georgia Hospital and Health Council
Atlanta

It is becoming more evident every day that hospitals, clinics and health centers can no longer isolate themselves and function economically and efficiently as individual units. The highly technical aspects of modern medical care and hospital administration make it almost impossible for small units operating alone to render satisfactory yet economical medical care and to properly discharge their obligation to the maintenance of the public health. It is imperative that some cooperative program be put into effect whereby each individual hospital can contribute its knowledge and experience for the common good, and profit by the special talents and achievements of the other.

Culminating nearly two years of planning and ground work, final steps are being completed for the organization of such a cooperative plan. A Georgia hospital and health service is being formulated which will offer expert consultative assistance to any community requesting aid in solving its hospital or medical care problems. This service will be in a position to assist hospitals and clinics in setting up anything from a clinical laboratory to a bookkeeping system. It will give advice on the establishment of a diet kitchen or the building of a medical library. In many cases, post-graduate scholarships will be granted for short technical courses in order to fill needs for these services in small community hospitals. Itinerate technicians will be sent to fill the need until local personnel can be trained. All phases of hospital administration will be covered, so that any hospital so desiring can obtain assistance in whatever particular problem it may confront. Educational programs will be set

up to afford local staff members an opportunity to take advantage of post-graduate work.

Behind this service is the concerted effort of a large group of Georgia physicians, hospital administrators and public health officials. This group was recently welded into a dynamic organization under the name, "The Georgia Hospital and Health Council". At the organizational meeting in Atlanta, January 17, 1950, the projects outlined above were discussed in detail. An executive committee was elected including, Dr. Tully T. Blalock, Atlanta, Chairman; Dr. Charles Jones, Atlanta, Secretary of the Council; Dr. Alex G. Little, Valdosta; Dr. Lester Harbin, Rome; Dr. Edgar H. Greene, Atlanta; Dr. John Elliott, Savannah; and Mr. Gene Kidd, Albany. Among the speakers discussing the proposed projects were: Dr. J. E. Paullin, Atlanta, Dr. Hugh Wood, Atlanta, Dean of Emory University Medical School, Dr. Lombard Kelly, Augusta, Dean of University of Georgia Medical School and Mr. John Ransom, Atlanta, Director, Hospital Services, State Department of Health.

It is emphasized that participation in the service would be of a cooperative voluntary nature. The program is to be patterned after one already in operation in New England under the auspices of the Bingham Foundation. It is not the intention to interfere in any way with local management and control, but rather to study the needs and offer a service which will help to integrate and improve medical care throughout the State.

WARN OF ILL EFFECTS FROM OVERDOSES OF ASPIRIN

A warning that aspirin acts as a poison when taken in too large doses is given by three Philadelphia doctors.

Excessive amounts of the drug have a toxic effect on the brain, kidneys, and other organs, Drs. Bernard L. Lipman, Sidney O. Krasnoff, and Robert A. Schless point out in the current (October) issue of *American Journal of Diseases of Children*, published by the American Medical Association.

They report five cases of poisoning from overdoses of aspirin. Three patients were children, and there were two deaths in the series.

PRESIDENT'S PAGE

LEGISLATION

I had hoped to be able to announce that the new nonprofit Hospital Service Bill and the Medical Prepayment Bill had been passed by the Legislature, but at the present time both bills are still in the hands of committees. Your Public Policy and Legislation Committee is keeping in close touch with these bills and expects them to be reported out of committee and passed at an early date.

An interview with Oscar Ewing, appearing in the *Atlanta Journal*, quotes him as saying that: "President Truman's Health Insurance Plan is basically different from the British system. The payroll tax of three (3) per cent, shared equally by the employer and employee, would go into a fund to finance the medical service plan. That he contended would not be a new drain on the economy because the people are paying

for these services today. This is another way of financing. It is not socialism. It is not Nationalized Medicine."

One of the industries in LaGrange offers to their employees' a policy which furnishes full hospital and surgical service and also medical service when admitted to a hospital. The cost of this policy averages less than the one and one half (1½) per cent which Mr. Ewing would have deducted from the worker's payroll. One hundred (100) per cent appears to be a high tax for the Federal Government to impose on a man for the privilege of protecting himself against the cost of illness.

Mr. Ewing is probably correct when he says, "This is not Nationalized Medicine." It is not any type of medicine. It is not any type of insurance. It is pure political chicanery.

ENOCH CALLAWAY, M.D.

Editor's Note: This is February 14. The General Assembly of Georgia ended its session yesterday. Dr. Callaway just called on the phone and requested that the members be informed, through his message, that both the Blue Shield and Blue Cross bills were enacted into law at this session of the Legislature.

Other medical bills enacted were: an amendment to the Medical Practice Act, sponsored and written by the Board of Medical Examiners of Georgia and later modified by the Committee on Public Policy and Legislation of the Medical Association of Georgia, which will permit the issuance of temporary licenses to certain alien physicians while in the employ of State institutions; and amendments to already existing laws dealing with Public Health: to clarify rules and regulations; to better handle the milk situation; and to permit the State Board of Health to use certain unexpended funds to help hospitals other than Battey in the control and treatment of tuberculosis.

Unfortunately, the Naturopath Bill was enacted into law despite all the efforts of the medical profession of this State to defeat this measure.

THE JOURNAL

OF THE
MEDICAL ASSOCIATION OF GEORGIA

EDGAR D. SHANKS, M.D., Editor
478 Peachtree Street, N. E., Atlanta, Ga.

FEBRUARY, 1950

AMA PRESIDENT RECEIVES LETTER

Many types of letters are addressed to the president of the American Medical Association, but Dr. Ernest E. Irons received one recently that is a No. 1 morale builder.

Reading it, said Dr. Irons with a smile, one becomes suddenly aware of a fresh breeze blowing through tired brain cells.

The letter did not come from a doctor. It was written by Mr. Joseph Christensen, of the Progressive Cafeterias in Chicago, and reads as follows:

"I cannot put M.D. after my name but I can, at least for a while, still put U.S.A. As a consequence, please accept the enclosed check for \$25 as a slight token of regard for my doctor and all his colleagues. These are my 'dues' as a citizen, and I hope they will help in your fight against socialized medicine.

"As people without guts are soon a nation without guts, and if it should become necessary to remove any part of mine, I want to pick my man and pay his charge without a precinct captain getting his nose in my anatomy."

THE ALLEGED SHORTAGE OF PHYSICIANS

During the past few years officials of the Federal Security Agency frequently have alluded to a shortage of physicians which will exist, they claim, in 1960 if heroic measures are not taken to increase enrolments in medical schools. The Federal Security Agency recently published a bulletin entitled "Health Service Areas: Estimates of Future Physician Requirements," by Mountin, Pennell and Berger.¹ This 89 page study is intended to reveal the number of physicians needed in 1960 to meet certain "minimum measures of adequacy." The base year from which the compilations are projected is 1940. The authors have estimated that there will be 227,000 physicians living in the United States in 1960 and that this will provide 143 physicians per 100,000 population. In 1940 there were 133 physicians per 100,000 population. Thus, the first conclusion of the authors is that the number of physicians per 100,000 population will rise from 133 to 143 between 1940 and 1960. The medical population has increased more rapidly than the general population since 1940, and the authors offer assurance that this trend will continue until 1960.

The data offered in the Federal Security Agen-

cy report can be questioned on several counts. For example, in one table figures are presented that show the number of physicians per 100,000 population has declined from 149 in 1909 to 125 in 1929; thereafter the number rose to 133 in 1940 and 137 in 1949. This compilation does not take into consideration, however, the fact that the earlier decrease in the physician-population ratio was the result of the closing of weak medical schools and "diploma mills." The significance of the term "physician" with respect to training and ability differs so markedly today from the significance of the term in 1909 that any crude statistical formula invoked to compare or contrast the situation in the two periods must be rejected. It is interesting to observe that, although the authors have included this table in their bulletin, they do not utilize it in deriving their "minimum measures of adequacy." There are reasons to believe that there will be several thousand more physicians in the United States in 1960 than the 227,000 estimated in this study. Nevertheless, it is reassuring to know that even the authors of this study predict that the number of physicians per 100,000 population will increase. The United States already has the largest number of physicians per 100,000 of any nation except Palestine, where there is a large number of refugee doctors.

Mountin, Pennell and Berger do not accept 143 physicians per 100,000 population as adequate for 1960. In estimating the "adequate" number for 1960, the authors begin with the active nonfederal physicians in 1940 in each of 126 politically boundaried health service regions; they then array these regions in descending order of number of physicians per 100,000 population and then select the twelfth, sixteenth and thirty-seventh regions as standards A, B and C. (The final estimates for 1960, however, include all physicians alive in 1960 rather than just the active nonfederal physicians). Under method A the twelfth region, the center of which is Buffalo, is set as the standard because one fourth of the population of the United States in 1940 lived in the first twelve regions. Since the Buffalo region contained 146 active nonfederal physicians per 100,000 population in 1940, the authors reason that the 114 regions which had fewer than this ratio should be brought up to the level of 146 by 1960 while the regions 1 to 12 are left with their 1940 ratios. The center of the sixteenth region is Newark, N. J. This region is chosen as the standard under method B because one third of the people in 1940 lived in the first sixteen regions. The authors propose under method B to increase by 1960 the supply of physicians sufficiently to raise the 110 regions below the Newark level up to the Newark level of 136 and to maintain the 1940 ratios in regions 1 to 16. Likewise they select region number 37, the center of which is Madison, Wis., as their

1. Mountin, J. W.; Pennell, E. H., and Berger, A. G.: Health Service Areas: Estimates of Future Physician Requirements, Federal Security Agency, U. S. Public Health Service, Bulletin 305, 1949.

standard under method C because one half of the people of the United States in 1940 lived in these first 37 regions. On this basis they would recommend increasing the medical population to provide the Madison level of 118 active nonfederal physicians per 100,000 population in all the 39 regions below this level while maintaining the 1940 ratios in regions 1 to 37. Translated into national ratios for all physicians, not just active nonfederal, method A assumes that the physician-population ratio in 1960 should be 172, method B, 165 and method C, 154, instead of the 143 which the authors predict. The 1960 deficits according to the three "minimum measures of adequacy" will be 45,053, 33,666 and 17,413. Instead of the 227,119 physicians predicted for 1960, under these three estimates there should be 272,172, 260,785 and 244,532.

The methods employed in this study are so unrealistic that the study adds nothing to the knowledge of the physician requirements of the American people now or in 1960. The authors have not made any apparent attempt to rate these 126 health service regions according to mortality and morbidity rates, in spite of the fact that the 1940 crude death rate (unadjusted for age distribution) was roughly 11.8 deaths per 1,000 population for the top 12 regions in the authors' array according to number of physicians per 100,000 population and only 10.2 in the lowest twelve of the 126 regions. Furthermore, the Buffalo region, the first standard used, contains two medical schools. The inference from method A is, therefore, that every one of the 114 health service regions below the Buffalo level should contain the equivalent of two medical schools. In addition, the Buffalo ratio of 146 set as the standard under method A would be reduced to 135 if the interns, residents and the teachers in that region were eliminated and would be further reduced if the physicians employed by industry also were eliminated. Although the Newark region does not have a medical school, the number of interns, residents and industrial physicians is too large to permit use of the Newark region as a standard. The Madison region does have a medical school.

The authors do not claim that the additional physicians needed in 1960 as computed by methods A, B and C would, if available, actually practice medicine in those regions below the three selected regions in the array of 126 regions. Apparently they are attempting to determine only the over-all national deficit. The authors make it clear that these calculated deficits existed in 1940 and are not deficits which will arise between 1940 and 1960. If their three calculated deficits for 1940 were adjusted upward to allow for inactive and federal physicians, the shortages under their three methods for 1940 would actually exceed their shortages for 1960. Thus it is obvious that these shortages for 1940 or 1960 are declared shortages or assumed shortages. The

methods employed by the authors established the shortages; an attempt is not made in this particular study to prove or disprove that there was a shortage in 1940. Had the number of physicians in each of the 126 regions been twice as great in 1940, their deficits would likewise have been twice as great. Their study provides an excellent example of an assumed conclusion.

If a method of measuring national shortages of physicians is valid, it should be equally applicable to most, if not all, professions and occupations. It could be shown by the authors' methods that in 1940 there was an inadequate number of dentists, of teachers, of lawyers and of persons in every gainfully employed occupation. In fact, one might deduce the principal fault with the United States was that there were only 132,000,000 persons in 1940 when actually the authors' "minimum measures of adequacy" would have required forty or fifty million additional!

It is difficult to forecast the national demand for physicians because it is practically impossible to estimate in advance the rapidity of technologic progress in the practice of medicine. Nevertheless, it is possible that there will be a surplus of physicians in 1960. During the 1940's, a great increase in the number of auxiliary personnel, as well as improvements in therapeutic remedies, greatly enhanced the amount of medical service which any 1,000 physicians could render. The Bureau of Medical Economic Research of the American Medical Association has estimated that the increase in productivity per physician during the 1940's might have been as much as one third. If this rapid and widely recognized trend continues, it certainly seems more reasonable to expect a surplus than a deficit of physicians in 1960. Obviously a crisis in the health of the people does not now exist. In any event, physician-population ratios are not true measures of the demand or supply of physicians. The most important objective is raising the standards of performance in the medical profession. The number of physicians divided by the number of people and multiplied by 100,000 to obtain the ratio of physicians per 100,000 population certainly cannot be expected to provide a satisfactory guide to Congress or to the American people on the number of physicians needed. A satisfactory study would pinpoint the situation in every section of the United States.

Mountin, Pennell and Berger appear to have arbitrarily chosen 1960 as the year when the number of physicians in the low ratio areas of 1940 should meet their three arbitrarily chosen "minimum measures of adequacy." Why not take 1970 or 1980 as the objective? In fact, even the data furnished by the authors suggest that by 1980 the steady increase in the number of physicians per 100,000 population will meet standards B and C and possibly standard A set by the authors. The arbitrary selection of 1960 as a goal

supports the impression that the authors have "assumed their conclusions."—*AMA Bureau of Medical Economic Research Miscellaneous Publication M-31*.

REPORT NEW TEST FOR CANCER OF UTERUS

A new test for cancer of the uterus has been developed by two doctors of the University of Chicago.

An estimated 17,000 women in the United States die annually of cancers which are uterine in origin.

The test is a laboratory procedure for determining the activity of an enzyme (compound that expedites chemical reactions), Drs. Lester D. Odell and James C. Burt report in the January 28 *Journal of the American Medical Association*.

The test is not to replace procedures now in use but is to be used as an aid to other methods of diagnosis, they emphasize.

"For the past several years the Papanicolaou smear has been used in some clinics as a screen for uterine cancer," the doctors say. "Unfortunately, false negative tests occur. Furthermore, it is acknowledged that specialized training in cytology is a prerequisite for reliable results.

"Even if the Papanicolaou method were satisfactory, there are not enough trained cytologists, and there is little prospect of training them for years. Every physician would welcome a simple chemical test which could be used with confidence.

"Cancer tissues may exhibit quantitative differences in enzymic pattern from their benign counterparts. The problem in obtaining a diagnostic test has been one of finding the enzyme (or enzymes) which is most quantitatively altered and a reaction which is simple enough for average technical facilities.

"In a limited but carefully controlled series of cases, estimation of the activity of the enzyme beta-glucuronidase was successfully used as an adjunct for diagnosis of cancer of the uterus."

The method of determining activity of the enzyme, as described by the doctors, involves a chemical processing of vaginal fluid or tissue following which positive or negative results are determined by color reactions.

In 665 tests, 20 per cent showed false positive results, the doctors say.

REPORT SUCCESSFUL USE OF ACTH IN TREATMENT OF GOUTY ARTHRITIS

Prompt and dramatic relief of gouty arthritis in three patients following administration of one or two injections of ACTH (pituitary adrenocorticotrophic hormone) is reported by two Pittsburgh doctors.

All three patients were middle-aged men, Drs. H. M. Margolis and Paul S. Caplan of the School of Medicine of the University of Pittsburgh say

in the January 28 *Journal of the American Medical Association*.

"Striking beneficial results" were noticeable in two patients in an hour to an hour and a half after a single injection of ACTH was given, according to the article.

"A man aged 59 sought treatment because of recurring attacks of severe gouty arthritis of 16 years duration," the doctors say, describing one patient.

"The attacks, which had involved at various times the joints of the big toes, the knees, wrists, elbows and ankles, would last several weeks to a month.

"About August 1, 1949 the patient had his severest attack involving the left hand and wrist; it progressed within several weeks to involvement of both hands, wrists, elbows and shoulders, the neck, spine and feet. The pain was violent and the patient was completely disabled. He could not raise his arms to feed himself and he could not clench his fists.

"On September 18 at 11:40 a. m. ACTH was administered intramuscularly. By 12:55 p. m. the patient had practically recovered from the acute gouty attack. He was able to move his hands, elbows and shoulders without any discomfort, he was able to feed himself, and he had no pain in the neck, back or feet. The tenderness of the joints had disappeared.

"Except for minor nondisabling joint symptoms related to the chronic rheumatoid arthritic changes, the patient has remained comfortable and active."

A.M.A. COUNCIL WARNS OF NEED FOR INFORMATION ABOUT PESTICIDES

Unless certain information about new agricultural poisons is supplied before they are released for general distribution, accidents may occur which will offset the potential benefits of these new materials, the American Medical Association's Council on Foods and Nutrition warned today.

The statement of the council, which appears in the January 28 *Journal of the A.M.A.*, follows in full:

The introduction of numerous new synthetic organic pesticides offers promise for increasing the nation's food supply and improving health through the control of insects and other pests. Past experience, however, indicates that poisons cannot be used safely on food crops without the development of certain fundamental knowledge concerning the poison.

What these materials will do to pests and food crops and to the workers who handle them must be known, and there must be developed, also, a knowledge of what these materials will do to warm-blooded animals and man when small amounts of residue are incorporated in their foods. Furthermore, practical methods of analysis should be available to permit identification

and measurement of residue that may persist on or in consumer products. Such essential information is undeveloped for many of the agricultural poisons now in use.

It is the opinion of the Council on Foods and Nutrition that the information on the following factors should be supplied before pesticides that may contaminate food or forage crops are released for general use:

(1) Chronic as well as acute toxicity tests. These should be carried out in such a manner as to demonstrate satisfactorily the toxicologic effects of pesticides on warm-blooded animals and man.

(2) Accurate methods of isolation and quantitative determination of pesticide residues in biologic material. These methods must be sufficiently rapid as to be of practical use in the examination of perishable foods.

Thorough pharmacologic investigations and practical quantitative methods are two of the most vital and pressing current needs in this field. The fundamental requirement for the orderly development of needed information must not be ignored. Unless this information is supplied safe methods for handling and use cannot be developed. Furthermore, unless this information is supplied before new agricultural poisons are released for general distribution, accidents may occur which will offset the potential benefits of these new materials and cause delay in their adoption.

THE AMAZING YEAR 1949

Nineteen forty-nine also could very well be declared the Great Achievement Year in Medicine. The name could be applied largely because of the tremendous strides made in research and in therapeutics, especially in three specific fields: (1) Atomic Medicine, (2) Cancer Investigation, and (3) Development of the Antibiotics.

In retrospect one cannot imagine the total funds now applied to research problems. Every medical school in the country has investigators at work, either in chemistry, in biology or in other phases of study. The Government has also allotted large funds for child welfare, rheumatism, heart disease and atomic research. The American people, besides paying taxes and more taxes, have given liberal support whenever called upon to help out in cancer, poliomyelitis, tuberculosis and whatnot. The health of the people as a whole was never better, and our statistics would indicate the United States to be the healthiest country in the world! People are living longer than ever before, and the matter of caring for our older citizens now looms as the one big problem before the nation. People who die now at 80 would, in the next 25 years, die at 100 or older. Geriatrics must become a new and wider field for the practitioner. We should not be misled, however. Not all of this progress has

been due to any single group but to many, and preventive medicine must claim a big share of the credit for our state of well being. Pure water, better milk, elimination of Bang's disease and intestinal parasites, control of syphilis, gonorrhea and rabies—all have played a remarkable part in the search for better health. It is actually amazing when one realizes what has been accomplished in reducing infant mortality. Some one has said that medical science has advanced more in the past 50 years than it had in 1,000 previous years. This is certainly true and astoundingly so.

With the preceding thoughts in mind, let us turn now to some of the specific advances. This column has been more devoted to "Cancer" than any other division of medicine; therefore, let us bring ourselves up to date on some of the latest revelations about that disease.

Cancer research leads the field of activity at present, and I dare say that most every foundation in the U. S. has some project concerned with cancer, its cause and control. The money expended for investigation is almost staggering. In 1947-48 the American Cancer Society alone received \$13,221,000.00 in contributions. Money has also poured in from many other sources to clinics and leading institutions to keep the work going. Out of all these efforts, new information and new thoughts are slowly developing. Powerful microscopes are being devised for cellular study. Radio isotopes are coming forward in stride, and, besides the valuable therapeutic agents that are being produced, chemicals such as phosphorous can be made radioactive, and can be traced through the body and into cells. In the field of hormone therapy it is now known that certain hormones can either control or produce malignancy. Radioactive iodine offers a standard procedure in treating Graves' disease and malignancies of the thyroid. Theories as to the cause of cancer have been prominent and a few facts are acceptable as unrefuted, such as the influence of chronic inflammation and possibly inherited stigmas. Tumors can be produced at will by inoculating mice and inbreeding them. Cancer can also be produced, and almost every type at that, by using the various carcinogenic agents, such as methylcholanthrene.

There is some indication that a virus might be associated with malignancy, and milk seems to be indicted as a vehicle of distribution, especially in cancerous mice. However, it probably remains true that we actually know very little about the etiology of cancer, and, according to the latest report by Gye and his associates in London, many of our current ideas about the nature of cancer "can be quietly relegated to the waste basket." Dr. Gye and his workers seem to have proved that cancer is generated by an agent residing within the malignant cells, which can be separated, frozen and dried to dust, reactivated and will

then produce a cancer again. The agent, which they believe to be an infective one, causes all kinds of malignancy, and can be termed a "virus." This work, if correct, might well shake the cancer world. Heretofore, most scientists have felt that malignancy depended upon inherent cellular growth which could be stimulated by a great number of substances, and this thought seems still to be one that cannot yet be discarded. It is of interest to recall that one of the world's greatest scientists, working in his small laboratory in Germany in 1907, made a very profound experiment and found that malignant tissue could be transplanted after it had been retained at a freezing temperature! At first it was believed that tumors, produced by tissues that had been frozen, demonstrated the capacity of malignant cells to survive conditions which were incompatible with life. Gye and Cramer thought otherwise. They confirmed their contrary opinions by freezing normal embryonic tissues and found that such tissue does not live after its exposure to extreme cold! Gye also proved that exposure of malignant tissue to a temperature of -79 degrees for more than a year did not destroy the ability of the cancerous virus to form tumors when transplanted. They went further in these experiments at the Imperial Cancer Research Institute in London. They froze cancer tissue and then reduced it to *dried dust* and were still enabled to produce malignant tumors. Mann and Dunn have also performed similar experiments and have produced mammary cancers in mice. They have also devised a thought that a virus of cancer, such as the Bittner milk factor, when transmitted, remains dormant and widely distributed into the tissues, and only becomes active and effective by continued exposure to such a hormone as estrogen, when it will then produce tumors in the breast. These experiments led us to concede that there is a continuing cause of cancer in the form of a resistant type of virus which can be *freed* from the living or dead cells, and if this hypothesis be true then we should be within sight "of the road to be traveled towards a cure for cancer."

It would take columns of paper to cover thoroughly all other discoveries in the immediate years just passed which have come so strongly to be emphasized in 1949. We might just mention a few to keep informed.

The antibiotics lead with penicillin, streptomycin, neomycin and auroemycin, and it now appears that chloromycetin might well prove to be the wonder drug of the ages. Don't let us shove the sulfa drugs aside, because they continue to throw a mighty wallop against certain maladies, and their cheapness make them continually in demand. The antibiotics and sulfa chemicals have turned the practice of medicine to a magic field, away from suffering and despair. Pneumonia, meningitis, syphilis, gonorrhea, strepto-

coccal infections, endocarditis and a host of other diseases have fallen by the conquerors' side. And now comes the climax with the recent report by Payne and Levy and their associates in the J.A.M.A., December 31, 1949, of the effectiveness of chloromycetin in treating pertussis! This malady, as everyone knows, has been continually one of our leading killers of our young people for untold years. We must also refer to ACTH. This hormone seems to be amazing. It might well turn out to be unlimited in its use. It not only shrinks tumors, relieves pain, but has also been shown to have a splendid effect as blocking agent in hypersensitivity concerned with allergy. It appears to control asthmatic attacks, and in a small series of patients all asthmatic symptoms disappeared in 48 hours to 8 days.

Thus the wheel of research and investigation rolls on. Much has been accomplished; much needs still to be done. Numerous ideas and theories must be re-evaluated, some accepted, others discarded.

It might well be added that in the performance of research, all cannot be superdupers in this important field of endeavor; however, there is good reason to expect every member of the medical profession to be on the lookout for any new observations in the clinical or pathologic fields that might give clues to some important leads. To illustrate, the recent report, and apparently the confirmation, that Jewish women seldom have cervical or uterine cancers, is an observation that could well be of great significance. In the histologic or pathologic group we might spend some time further studying the effect that the antibiotics might have on cancer. This much seems to be true, that secondary and primary cancers, especially those in the intestinal cavities, appear somewhat retarded after the administration of considerable quantities of penicillin and streptomycin. The involved malignant ulcers certainly appear to be less necrotic with decreased inflammatory reaction in the deeper tissues adjacent thereto. The invasive structures seem to more quickly react to fibrous tissue in an effort to withhold the metastatic processes. More work will be reported on these observations as time passes, and it may well open a greater use for the antibiotics as secondary helpful aids in controlling cancer.

JACK C. NORRIS, M.D.

REPORT EARLY TREATMENT PREVENTS PAINFUL FOOT DEFORMITIES LATER

Painful foot deformities in adult life may be prevented by manipulative treatments at the first sign of any unusual condition in babyhood, two Wisconsin doctors report in the October 15 *Journal of the American Medical Association*.

According to Drs. Donald W. McCormick of Fond du Lac and Walter P. Blount of Milwaukee, a condition known medically as metatarsus adductovarus and commonly as skewfoot

is now more prevalent in this country than clubfoot. In skewfoot the fore part of the foot tends to curve inward.

Untreated, it may persist as an annoying deformity with displacement of the big toe, bunion, flatfoot and chronic foot strain, the Wisconsin physicians report.

"Adequate early and persistent manipulative treatment with casts will completely correct the moderate deformity," they say. "As skewfoot is recognized and treated by the orthopedic surgeon in the nursery, much disability in adult life will be eliminated."

SKIN DISEASE ATTACKS FLORIDA SWIMMERS

People who bathe in the ocean off the lower East coast of Florida are being attacked by a strange skin disease, according to Dr. Wiley M. Sams of Miami.

A rash or welts and associated itching occur a short time after leaving the water, Dr. Sams reports in a current issue of *Archives of Dermatology and Syphilology* published by the American Medical Association.

The disease appears at infrequent intervals and its occurrence is unpredictable, he says. Cause of the eruption has not been determined.

"In children, especially in younger children in whom the eruption is extensive, fever is common, often with a temperature to 101 or 102 F., and sometimes higher," he writes. "In spite of the severity of the symptoms, however, the disorder ordinarily will run its course in four or five days."

TREAT SCARLET FEVER WITH HUMAN BLOOD FRACTION

Gamma globulin, a fraction of human blood, compares favorably with antitoxin as a treatment for scarlet fever, a study made by Dr. Francis F. Silver of Western Reserve University School of Medicine, Cleveland, shows.

Dr. Silver treated 106 patients with gamma globulin and 108 with scarlet fever antitoxin, he reports in the September issue of the *American Journal of Diseases of Children*, published by the American Medical Association.

The blood fraction and the antitoxin "affected the temperature and accelerated the fading of the rash in like manner and degree," Dr. Silver says.

"There were fewer complications (15.7 per cent) in patients treated with human immune globulin than in those treated with scarlet fever antitoxin (25.6 per cent)."

REPORTS POISONING FROM USE OF INSECTICIDE

An insecticide using an ingredient which Germany had developed during the war as a substitute for nicotine is blamed for the poisoning of a user in an article in the September 17 *Journal of the American Medical Association*.

The American manufacturer of an insecticide (trade name, vapotone-XX) on its label states that tetraethylpyrophosphate (TEPP) comprises 20 per cent of the compound. In reporting the illness of a 17-year-old boy who used the substance to spray melons, Dr. Jacob Faust of Baton Rouge, La., said:

"In view of the small dose necessary to produce symptoms and the possibility that poisoning may occur through cutaneous absorption of the compound, it is recommended that practitioners be on the lookout for such cases and that commercial compounds of this type be labeled to impart more detailed information for the protection of their users."

Dr. Faust said that boy developed weakness, abdominal cramping, diarrhea, and vomiting after spraying melons with the compound and eating a melon without first washing his hands. He recovered without any aftermath.

THEORY SUGGESTS PREVENTION OF CANCER BY ARTIFICIAL FEEDING OF BABIES

The "vertical epidemic" theory of cancer merits consideration because it raises the question of preventing breast cancer in women by the artificial feeding of infants born to mothers with a family history of cancer, says an editorial in the September 17 *Journal of the American Medical Association*.

"The development of mammary carcinoma in mice can be prevented by isolating newly born animals from their potentially cancerous mothers and transferring them for nursing to mice whose milk is free from the tumor agent," it explains.

"The newly born mice become infected by the milk of their mothers; they remain in perfect health, however, through early adult life, mammary carcinoma developing at one to one and a half years of age. In the meantime, they may transfer the tumor agent to their own offspring and thus assure the continuation of the disease."

The theory assumes that breast cancer in humans may be caused by agents similar to the one responsible for breast cancer in mice, the editorial points out, adding:

"If this is true, women with a history of cancer should not nurse their babies; artificial feeding should be substituted. This simple measure may interrupt the flow of the virus and eradicate a strain of human breast cancer within one generation."

The editorial points out, however, that the hypothesis is not perfect, since it provides no explanation of why cancer can be produced in mice by other methods.

MEDICAL OPINION IS NEEDED BEFORE CONTACT LENSES ARE WORN

Would-be contact lens wearers would do well to secure medical opinion before attempting to wear the lenses, points out an article in the current (October) issue of *Hygeia*, health magazine of the American Medical Association.

At least some of the disadvantages of contact lenses may be reduced or eliminated by the new "waterless" type, says Marguerite Shields, Chicago, of the A. M. A. bureau of press relations.

This new contact lens, according to the producers, is "solutionless, medically correct, and safe." Describing the lenses, an A. M. A. exhibit list says:

"The patient's tears from the necessary fluid lens, thereby eliminating the difficulties caused by artificial buffer solutions. The new lens can be worn over long continuous periods with comfort."

Study by ophthalmologists will be required, however, before the new lenses become generally available, if ever, the article advises.

"At present they are an encouraging development, but would-be contact lens wearers would do well to remember the recommendation of the American Committee on Optics and Visual Physiology that medical opinion

should be secured in every case before contact lenses are prescribed."

COLD-SUSCEPTIBLE PERSONS RATE HIGH IN ALLERGIES

Weather changes and wet feet often get the blame for frequent colds, but two University of Illinois doctors are convinced that a hidden allergy may be at fault.

People for whom life is just one snuffle or sore throat after another during the common cold seasons have more allergies than hardy persons who resist the virus, Drs. Noah Fox and George Livingston of Chicago found.

Reporting in a current issue of *Archives of Otolaryngology*, published by the American Medical Association, the doctors describe a study of more than 3,000 cold victims of all ages and walks of life.

Only 358 of this cold-susceptible group had no personal or family history of allergy, while 2,127 were or had been allergic.

"Frequently allergy goes unnoticed because it is of the borderline variety," the doctors write. "The nose and pharynx (throat) of the cold-susceptible patient must be examined to ascertain whether there are changes in the structures.

"The mucous membranes of the allergic person seem always to harbor organisms, ready, when the proper stimulus occurs, to overgrow.

"Although it is popularly believed that exposure to cold, humidity, fatigue, and debility are associated with lowered resistance to the common cold, confirmatory laboratory data are still lacking. However, these same factors are known to influence severely the allergic state of a patient.

"The great frequency of other allergies in the cold-susceptible person or in members of his family suggests a specific allergy to the virus or its proteins."

HEALTHGRAMS

Convincing arguments can be advanced to support the thesis that tuberculosis is the most important among the diseases which are both preventable and curable. Carl Muschenheim, M.D., Amer. Rec. Tuberc., July, 1949

* * *

Health education is the application of measures to induce experiences which favorably influence knowledge, attitudes and actions for the prevention of disease and the perfection of health of the individual members of society. Ira V. Hiscock, Pub. Health News, Feb., 1949.

* * *

If tuberculosis control is to reach its proper goal—the disappearance of tuberculosis from the United States—every reservoir of infection must be found and eliminated. One of the great sources of infection still remaining in this country may be found among inmates of mental institutions. Over and over again we have been told of the high rates of disease which prevail there. In 1946 there were 635,769 mental patients in the United States, and 4,247 of them died of tuberculosis. This is a rate of 668.0 per 100,000 in contrast to 36.4 for the general population. Deaths from tuberculosis in mental institutions comprised 8.3 per cent of the total deaths from tuberculosis in the United States during that year. Robert J. Anderson, M.D., Pub. Health Rep., Jan. 7, 1949.

MACON HOTELS

Macon hotels are: Dempsey, Lanier, Central, Southland, Colonial, and Milner. Tourist courts are: Magnolia, and Peach State. The dates of our annual session are April 18-21. Get your reservations now.

COMMUNICATION

Savannah, Ga., Jan. 20, 1950.

Dr. Edgar D. Shanks, Secretary
Medical Association of Georgia
Atlanta.

Dear Edgar:

Just a line to give you a little job. About this time every year a notice is placed in *The Journal* relative to the awards which the Association has to offer to its membership. Would you insert such a notice covering these points?:

The Medical Association of Georgia has several awards which its offers to its membership in competition in certain specific lines, namely:

The Crawford W. Long Memorial prize which is offered for the best essay on *original* work done by the author. The essay describing this research work must be delivered before the convention of the Medical Association of Georgia at its annual session and must be the work of a member of the Association in good standing.

The Hookworm Prize is presented to a member of the Medical Association of Georgia who has done some original, some beneficial or some outstanding work on this disease.

The Hardman Loving Cup is presented to a member of the Medical Association of Georgia who has done some progressive or outstanding work, scientific or otherwise, whereby the Association has been benefited.

These prizes are controlled and awarded by the Awards Committee of the Medical Association of Georgia. They are presented annually when there is a winner. It is the desire of this committee that there be active competition for these prizes. They are pleased to have suggestions relative to possible worthy winners of the two latter prizes. Their names and data can be sent directly to the chairman of this committee.

And Edgar, dear: You might get your secretary to send a short note to each of the essayists of essays to the committee in competition for the Crawford W. Long Memorial Prize. About six copies should be sent. This would be done by March 15.

I would have attended to this sooner, but on Christmas Eve I had a bad fall resulting in the fracture of two ribs, bursting the cartilages and doing me up generally. Was confined to home for three weeks and, although out now, I am not worth a darn.

WILLIAM R. DANCY, M.D., Chairman,
102-4 Jones St., West
Savannah, Ga.

NEW PLANS FOR EMORY CLINICS

The clinics this year will follow a completely revised plan directed to the needs of the general practitioner. Concentration of the program to a three-day session will also be of value.

Three lectureships have been provided for and one will be given each day at noon. These are: the Elkin Lectureship provided by Dr. Daniel C. Elkin, Whitehead Professor of Surgery; the Warren Lectureship, provided by Dr. William Warren, and one provided by an anonymous donor.

The morning programs will be devoted to medicine and surgery and the major specialties of obstetrics and pediatrics. In the afternoon, the round-table or panel programs will be given, with a question and answer period to encourage participation by everyone.

The Medical Association of Georgia will hold its 1950 annual session in Macon, April 18-21.

GEORGIA DEPARTMENT OF PUBLIC HEALTH

ORGANIC PHOSPHORUS INSECTICIDES

The group of insecticides known as organic phosphates has come into widespread use in the past few years, particularly in agricultural areas including Georgia. All who use these preparations are warned of their dangers by the original manufacturers, responsible governmental agencies, and the like. All warnings advise the victim of poisoning to immediately seek medical attention. The following warning just released in the *Market Bulletin* by the Georgia State Department of Agriculture in cooperation with the State Health Department is a typical brief summarization of preventive measures.

Danger! Take Notice

1. Two new organic phosphates, diethyl-nitrophenol thiophosphate, and tetra-ethyl pyrophosphate, commonly called Parathion and Tepp, are excellent controls for many kinds of insects but, like many poisons, are also highly toxic to humans.

2. They are poisonous if swallowed, inhaled, or absorbed through the skin.

3. Learn to use Parathion and Tepp safely.

4. Avoid breathing in the wettable powder while opening bags and introducing it into the spray tank and avoid inhaling the spray mist during the spray operation.

5. Wear an approved respirator when spraying or dusting. Keep on hand an adequate supply of cartridges and filters for the respirator.

6. Wash hands and face after handling these chemicals and before eating or smoking.

7. Wear protective clothing. A light plastic raincoat and hat give good protection.

8. Never handle these chemicals with the bare hands—always wear natural rubber gloves.

9. Atropine is the emergency antidote, but is obtainable only on a doctor's prescription. Do not use morphine. While using these chemicals, if you get a headache, blurred vision, weakness, cramps, nausea, diarrhea, or discomfort in the chest, quit spraying or dusting at once, take two atropine tablets, and go to a doctor.

Because widespread use is so new, some physicians may not be sufficiently familiar with the nature and pharmacology of the drugs, and symptoms and diagnosis of poisoning. Intelligent recognition and treatment of cases require such knowledge.

The specific poisons are: (1) Parathion (also commercially known as Thiophos); (2) Tetra-ethyl-pyro-phosphate (TEPP), and (3) Hexa-ethyl-tetra-phosphate (HETP). They are manufactured as concentrates; they are mixed, distributed, and used in the field as primary or secondary dilutions in dusts or liquid sprays. They are all extremely toxic. Lehman gives the mean

lethal doses per kilogram body weight as 0.0035 grams (Parathion), 0.002 grams (TEPP) and 0.007 grams (HETP) respectively. Cases of poisoning have occurred in people engaged in the manufacture of the materials, in those compounding dilutions, in agricultural workers applying them, and even in people who have unwittingly come in contact with them.

Absorption. It appears that they all are readily absorbed through the intact skin as well as through the respiratory and digestive tracts. Symptoms have appeared within a very brief time after exposure, indicating rapid absorption. Dermatitis may develop at the site of contact, but this is not a constant finding and absence of skin irritation does not rule out immediate potential danger. Parathion in the eye produces an intense miosis, resulting in temporary blindness. One drop of TEPP concentrate in the eye of a dog has been sufficient to kill.

Pharmacology. The principal pharmacologic effect of these substances is the inactivation or destruction of the enzyme cholinesterase. This enzyme, normally present in the blood and other tissues, destroys acetylcholine. Destruction of the enzyme activity hence results in excess accumulation of acetylcholine which, in turn, produces stimulation of the parasympathetic nervous system. The muscarine-like effect is the underlying cause of the clinical symptoms. Evidence concerning chronic toxicity and cumulative action is incomplete. The question, "Does chronic exposure produce an irreversible reduction of cholinesterase activity or other cumulative effects?" is unanswered.

Signs and Symptoms. These are primarily the signs and symptoms of parasympathetic stimulation. They may vary from mild, transient symptoms to those of severe toxemia and death. In definite cases there is marked pupillary contraction and spasm of the eye muscles of accommodation which may persist for two or three days with resulting blurred vision and inability to focus. Headache, nausea, vomiting, dizziness, abdominal cramps, and diarrhea or constipation are other typical early symptoms. There may be a feeling of tightness in the chest, difficulty in breathing, bronchial spasm and pulmonary edema. Mental excitement, fibrillary twitching of the voluntary muscles, convulsions, and coma have all been observed. Primary excitation is frequently followed by depression of the central nervous system. Death is usually the result of combined pulmonary edema and congestion and edema of the brain.

Diagnosis. Accurate diagnosis depends upon obtaining a history of exposure. A high index of suspicion should be maintained, especially in agricultural areas where the materials are most

commonly used. However, cases have also occurred in the cities, especially among workers engaged in manufacture or formulation of insecticides. Any patient who complains of headache, dizziness, nausea, or blurred vision and who has come in contact with organic phosphate, should be suspected of suffering from acute poisoning. A lowered blood cholinesterase is confirmatory evidence. The Industrial Hygiene Laboratory is experimenting with the technique for performing this test and will be glad to receive samples submitted by a physician from any suspected case for experimental purposes; 10 cc. of citrated blood are necessary for the test.

Treatment.

(1) First aid instructions to the user:

Atropine is the emergency antidote for parathion poisoning. Atropine is obtainable only on a doctor's prescription. The doctors in your neighborhood should be informed regarding the symptoms of parathion poisoning and the treatment therefor, as shown below. Consult your doctor and arrange with him for a prescription of atropine grains 1/120 (0.5 mg.) to be kept on hand for emergency use. Never take atropine or any similar drug until AFTER warning symptoms appear. The symptoms of parathion poisoning include headache, blurred vision, weakness, nausea, cramps, diarrhea and discomfort in the chest. If you feel any of these symptoms while spraying with parathion, quit spraying, take two atropine tablets at once, and go to a doctor. Do not spray again with parathion or other organic phosphate insecticides until your doctor has examined a blood sample for parathion effect. When you go back to the job, be sure you observe all of the precautions outlined above.

(2) Additional information for physicians:

Parathion inactivates the cholinesterase enzymes of the blood and tissues and, therefore, the signs and symptoms resulting from excessive absorption are primarily those of marked parasympathetic stimulation. Hyperhidrosis, miosis, lachrymation and salivation may be noted in addition to signs and symptoms noted above. If the patient has already taken atropine, as indicated above, the physician should administer additional doses of grains 1/60 to 1/30 (1 or 2 mg.) of atropine every hour up to ten or 20 mg. in a day if necessary to control the respiratory symptoms and keep the patient FULLY atropinized. The intravenous route is the most rapid. It will be noted that the dosage of atropine here is in excess of amounts conventionally employed, but within safe limits. For mild poisoning this treatment alone is sufficient.

Do not give morphine. If pulmonary secretions have accumulated before atropine has become effective, the patient must be turned upside down to cough out mucus. The parasympathetic effect on the heart and lungs is blocked by atro-

pine. Weakness and muscular twitching are not controlled by this antidote. Even with very serious poisoning, atropine can completely protect the airway, but muscular weakness may become so extreme that artificial respiration is required. Insert a tracheal tube. Suck mucus from bronchi with a catheter. Empty distended stomach with Levine tube. Complete recovery may be expected even after a very severe acute poisoning and many hours of artificial respiration. Administration of oxygen is indicated at the earliest signs of pulmonary edema provided that adequate attention to the airway has been given. The acute emergency lasts 24 to 48 hours; patient must be watched continuously during this interval. Following exposure heavy enough to produce symptoms, further organic phosphate insecticide exposure should be avoided. The patient remains susceptible to relatively small exposures of parathion until regeneration of blood and tissue cholinesterase is nearly complete. Other organic phosphate insecticides also inactivate cholinesterase. Persons exposed to these become susceptible to parathion and vice versa.

Reporting. Physicians are urged to report cases of poisoning from insecticides to their Health Department.

LESTER M. PETRIE, M. D.

Director, Division of Industrial Hygiene.

REFERENCES

1. Abrams, H. K.: California Department of Public Health.
2. Hamblin, D. O.: Medical Director, American Cyanamid Company.
3. Rohwer, S. A.: Chairman, Interdepartmental Committee on Pest Control, U. S. Department of Agriculture, Bureau of Entomology and Plant Quarantine, Washington 25, D. C.
4. Lehman, Arnold J.: U. S. Food & Drug Administration, Washington, D. C.

NEWS ITEMS

The American College of Surgeons Sectional Meeting was held in Belleair, Fla., January 9-10. Georgia surgeons participating in the program were Dr. Thomas W. Goodwin, Augusta; Dr. Peter B. Wright, Augusta; Dr. Walter R. Holmes, Atlanta; Dr. J. Elliott Scarborough, Atlanta; Dr. David Henry Poer, Atlanta. Also attending were Dr. C. F. Holton, Savannah; Dr. J. Alvin Leaphart, Jesup; Dr. J. C. Patterson, Cuthbert; Dr. W. A. Risten, Dr. Robert Major, and Dr. W. J. Williams, all of Augusta; Dr. Herschel Smith, Americus, and Dr. D. N. Thompson, Elberton.

* * *

Dr. C. Raymond Arp, Atlanta, presented a paper at the annual meeting of The American College of Allergists held in St. Louis, Mo., January 18, entitled "Some Problems in Food Allergy."

* * *

The Bartow County Medical Society held its regular meeting at the office of Dr. Harvey Howell, Howell-Quillian Clinic, Cartersville, December 7. The following officers for 1950 were elected: Dr. C. L. Ellis, Kingston, president; Dr. H. B. Bradford, Cartersville, vice-president, and Dr. A. L. Horton, Cartersville, was re-elected secretary-treasurer.

* * *

Dr. W. C. Baxley, Blakely physician and surgeon, announces the removal of his offices to Magnolia Street, Blakely. The building has nine rooms with two baths, besides a large room for records and supplies. The building has a treatment, x-ray and diathermy room,

business office, separate waiting rooms for white and colored, and a room each for white and colored obstetric cases.

* * *

The Macon-Bibb County Board of Health, Macon, approves plan for retirement. The retirement plan, as explained by Dr. R. Frank Cary, health officer, was passed during the last session of the General Assembly. He said members will pay five per cent a year from their salary, to be deducted monthly. He said the State contributes a like amount, plus 1.83 per cent. The retirement age now is 70 years. Dr. W. D. Hazlehurst, Macon, was selected by the Bibb County Medical Society to take the seat on the board which was recently vacated by Dr. R. W. Edenfield, Macon.

* * *

The Bulloch-Candler-Evans Medical Society held its meeting at the Edwards Restaurant, Claxton, December 11. Dr. Myer M. Schneider, Savannah obstetrician, was guest speaker. He discussed "The Use of Stilbestrol in the Treatment of Abortions." Dr. Waldo E. Floyd, Statesboro, president.

* * *

Dr. Fred N. Clements, Adel physician and surgeon, has been appointed surgeon for the Southern Railway System by Dr. Milton B. Clayton, Chief Surgeon for the Southern Railway System. Dr. Clements is the son of Dr. H. W. Clements, Adel, who has been company surgeon for the Southern Railway System for the past 23 years and has found it necessary to restrict his practice to office work only.

* * *

The Crawford W. Long Memorial Hospital, Atlanta, has three doctors interning under a newly-established program designed to provide "more and better" general practitioners. Members of the Atlanta Chapter of the American Academy of General Practice, which is sponsoring the nation-wide program, believe it will mean in time more doctors for small towns and rural areas. An alarming shortage of well-trained general practitioners or "family doctors"—particularly in sparsely population areas in Georgia—prompted the program. The internships sponsored by the Crawford Long section of the Academy are the first of their kind in Georgia. Dr. John R. Walker, Atlanta, is chief of the Crawford Long Hospital Section, American Academy of General Practice. Doctors interning under the program now include, Dr. William L. Bridges, Sumner, Dr. Richard P. Campbell, Rockmart and Dr. Perry A. McGinnis, Knoxville, Tenn.

* * *

Dr. Hal M. Davidson, Atlanta, opened the discussion on a paper entitled "The Relation of Allergy to Character Problems in Children" by Dr. T. Wood Clarke, Utica, N. Y., presented at the annual meeting of The American College of Allergists held in St. Louis, Mo. on January 16.

* * *

Dr. Hal M. Davison, Atlanta, president-elect of the Fulton County Medical Society, was guest speaker at the monthly meeting of the Woman's Auxiliary to the Fulton County Medical Society held at the Academy of Medicine, Atlanta, January 6. Dr. Davison discussed "A Doctor's Philosophy."

* * *

Dr. Laurence B. Dunn, Savannah physician, was recently elected president of the staff of St. Joseph's Hospital, Savannah. His father, the late Dr. Matthew F. Dunn, was the first president of the St. Joseph's staff. A plaque near the entrance door memorializes the late Dr. Dunn, who served for some years as head of the hospital staff, which was organized in 1902. Dr. Dunn succeeds Dr. John E. Porter, who retired after serving a year in this capacity. Dr. Porter will continue as a member of the staff.

* * *

Dr. Harold A. Ferris, Atlanta, announces the opening of his office at suite 526 Candler Building, Atlanta.

Practice limited to internal medicine.

* * *

The Georgia Baptist Hospital Medical Staff held its annual banquet in the hospital cafeteria, Atlanta, January 17. Dr. G. Lombard Kelly, Augusta, dean of the University of Georgia Medical School, was guest speaker. His subject was "A Plan to Integrate Medical Education and Medical Care in Georgia". Edwin B. Peel, administrator.

* * *

The Georgia Heart Association Fifth District Chapter, Atlanta, was recently organized and the following officers were elected: Dr. Joseph C. Massee, Atlanta, president; Dr. J. Gordon Barrow, Atlanta, vice-president, and Dr. C. Purcell Roberts, Atlanta, secretary-treasurer.

* * *

The Glynn County Medical Society held its meeting at the City Hospital, Brunswick, January 17. Routine business was transacted and three new applications for membership received. Dr. T. V. Willis, Brunswick, conducted a symposium on "Gynecologic Problems." Dr. T. H. Johnston, secretary.

* * *

The Fulton County Medical Society held its semi-monthly dinner meeting at the Academy of Medicine, Atlanta, January 19. Scientific meeting—Dr. Shelley C. Davis, moderator. "The Personality and Plastic Surgery" (The Possibilities of Plastic Surgery), Dr. John R. Lewis Jr.; "Emotional Reaction of Children to Abnormalities", Dr. William H. Kiser; "Plastic Surgery and Psychiatry", Dr. John Campbell, and "Rehabilitation of the Patient by Plastic Surgery", Dr. Frank K. Kanthak. General discussion. Dr. A. Worth Hohby, secretary-treasurer.

* * *

Dr. Charles H. Daniel, College Park, was recently elected president of the Section of Obstetrics and Gynecology of the Crawford W. Long Memorial Hospital, Atlanta. Dr. A. Worth Hohby, Atlanta, was elected chairman of the Medical Section of the above named hospital for 1950.

* * *

Dr. Samuel A. Heaton, Augusta, announces the opening of his office in the Bleckley Building, Clayton, for the practice of medicine and surgery. Dr. Heaton graduated from the University of Georgia School of Medicine, Augusta, and spent thirty-two months in the Medical Corps of the U. S. Navy.

* * *

Dr. J. Hiram Kite, Atlanta, announces the association with him of Dr. Woodrow W. Lovell at 490 Peachtree Street, N. E., Atlanta, in the practice of orthopedics.

* * *

Dr. W. H. Lewis, Rome physician for more than 43 years, was recently named director of the Floyd Hospital, Rome, by the administrative board. Dr. Lewis is a native of Cincinnati, and a graduate of the University of Cincinnati College of Medicine.

* * *

Dr. W. D. Lundquist, who has been with the Georgia Department of Public Health, is the new regional medical director with headquarters at 1 Milledge Road, Augusta, in charge of health work of 28 counties. Dr. Lundquist previously served at Statesboro and Waynesboro.

* * *

Dr. Charles S. McCall, formerly of Bennettsville, S. C., announces the opening of his office in Albany for the practice of internal medicine and heart diseases.

* * *

Dr. Clarence W. Mills, Atlanta, announces the removal of his office to 809 Medical Arts Building, 384 Peachtree Street, N. E., Atlanta, for the practice of internal medicine and diseases of the chest.

* * *

Dr. Frank B. Mitchell, Jr., Metter, formerly physician and surgeon at the Kennedy Memorial Hospital, an-

nounces the removal of his office to Brunswick for the practice of medicine and surgery.

* * *

Dr. Hubert U. King, formerly of Nicholls, has been named health commissioner for Jenkins, Burke and Screvens counties, it was recently announced. His headquarters will be announced later.

* * *

Dr. W. J. Peebles, formerly health officer of Troup County for two years, recently assumed duties of assistant commissioner of health for Muscogee County, Dr. J. A. Thrash, Columbus commissioner, announced. Dr. Peebles has lived in Key West, Fla. for the past year. Dr. Margaret Olsen Peebles, his wife, will do part-time work with the Muscogee County Department of Public Health.

* * *

Dr. J. R. Sams, Covington physician and surgeon, has been appointed surgeon for the Georgia Railroad, according to Dr. John P. Garner, Atlanta, chief surgeon for the railroad, who made the appointment.

* * *

Dr. Paul T. Scoggins, Commerce physician and civic leader, was elected mayor of the city of Commerce for a full term of two years in the biennial city election of December 7.

* * *

Dr. A. R. Sims, Richland physician, attended the meeting of the Georgia Heart Association held at the Upson Hotel, Thomaston, December 13. For several years Dr. Sims has attended special courses in the study of diseases of the heart.

* * *

The Tift County Medical Society held its annual Christmas meeting at the Elks Home, Tifton, December 16. Dr. Carl S. Pittman, retiring president, was host to the members of the society. New officers for 1950 are Dr. Richard K. Winston, Tifton, president; Dr. R. E. Jones, vice-president; Dr. Tom Edmondson, secretary-treasurer; Dr. E. M. Flowers was named delegate to the Annual Session of the Medical Association of Georgia to be held in Macon, and Dr. C. A. Fleming, alternate delegate.

* * *

Dr. John H. Venable, Dalton, health commissioner of Whitfield and Murray counties, has resigned to become health commissioner of Spalding, Lamar and Pike Counties. His resignation is effective February 28 and he will assume his new duties on March 1.

* * *

The Upson County Medical Society held its December meeting at the Upson Hotel, Thomaston. The following officers for 1950 were elected: Dr. R. L. Carter, president; Dr. D. L. Head, vice-president; Dr. Herbert D. Tyler, secretary-treasurer; Dr. J. E. Garner, delegate to the annual session of the Medical Association of Georgia, and Dr. Herbert D. Tyler, alternate delegate. The society has sixteen members—all the practicing physicians in Upson County—and one honorary member, Dr. H. A. Barron.

* * *

The Ware County Medical Society held its January meeting at Hotel Ware, Waycross. Dr. W. L. Pomeroy and Dr. Leo Smith were hosts for the supper meeting. Dr. William A. Hendry, Blackshear, is president of the Ware County Medical Society, and Dr. Leo Smith, Waycross, secretary-treasurer.

* * *

The Ware County Board of Health, Waycross, recently named Dr. B. C. Youmans, Waycross veterinarian, rabies control officer for 1950, Dr. W. C. Hafford, chairman of the Ware County Board of Health and Commissioner of Health, announced.

* * *

Correction—Dr. Howell A. Wasden, Jr., was listed in the Thomas County membership roster published in the December issue of *The Journal* incorrectly as living at Boston. His correct address is Pavo.

Members of the Georgia Medical Society (Chatham County) reported after the membership roster was published in the December issue of *The Journal* are Drs. John S. Howkins, 111 East Jones St., Savannah, and P. H. Smith, 3 East Gordon St., Savannah.

* * *

The New York Polyclinic Medical School and Hospital, 345 West 50th Street, New York City 19, will hold a five-day Seminar in Otolaryngology-Ophthalmology, April 17-21, 1950. A review of recent advances in the diagnosis and treatment of the more common disorders in the fields of Otolaryngology and Ophthalmology, comprising lectures, motion pictures and demonstrations in the clinics, operating rooms and dissecting room. Members of the staff and visiting speakers will participate. For further information write Dr. David N. Barrows, Medical Executive Officer, 345 West 50th Street, New York City 19.

* * *

The Habersham County Medical Society held its December meeting at the home of Dr. George T. Nicholson, Cornelia. Scientific program: "Treatment of Fractures", Dr. James A. Green, Athens. Dr. E. M. Christenson, Alto Medical Center; Dr. George Tolhurst, Cleveland, and Dr. James A. Green, Athens, were guests. Officers for 1950 are: Dr. D. H. Garrison, Clarkesville, president; Dr. C. T. Hardman, Tallulah Falls, vice-president; Dr. George T. Nicholson, Cornelia, secretary-treasurer; Dr. J. Lee Walker, Clarkesville, delegate; Dr. George T. Nicholson, Cornelia, alternate delegate; Drs. Joe J. Arrendale and B. J. Roberts, both of Cornelia, censors.

* * *

Dr. William C. Coles, Atlanta, announces the opening of his office for the practice of radiology at 272 Courtland Street, N. E., Atlanta.

* * *

The Cobb Memorial Hospital, Royston, was dedicated January 22, and honor guest was Tyrus Raymond Cobb, baseball's famed Georgia Peach. The 23-bed hospital was dedicated by Mr. Cobb and its name honors his parents, Prof. and Mrs. Herschel Cobb, of Royston. Their famous son gave more than 100,000 toward construction of the modern medical center, of which total cost is \$216,000. Dr. Stewart D. Brown, Royston, boyhood companion and lifelong friend of the Georgia Peach is the superintendent of the hospital. Mrs. Stewart D. Brown is secretary-treasurer. Mr. Ty Cobb is honorary chairman of the Board of Trustees. Others on the program included Dr. Frank K. Bolland, Atlanta; Dr. Edgar D. Shanks, Atlanta, and John Ransom, Atlanta, director of hospital services division of the Georgia Department of Public Health. More than 3,000 persons attended the dedication of the Cobb Memorial Hospital, which will serve the people of Franklin, Hart and Madison Counties.

* * *

Dr. Howard J. Morrison, Savannah physician, presented a paper entitled "Breast Feeding" at the clinical session of the American Medical Association held in Washington, D. C., December 8.

NEW BOOKS

Questions Medical State Board and Answers: By R. Max Goepf, M. D., formerly Professor of Clinical Medicine, Graduate School of the University of Pennsylvania, and Professor of Medicine, Woman's Medical College of Pennsylvania; and Harrison F. Flippin, M. D., Associate Professor of Medicine at the Graduate School of the University of Pennsylvania. New, 8th edition, 663 pages. Philadelphia and London: W. B. Saunders Company, 1950. Price \$7.00.

Members of hoards of medical examiners, while perhaps a bit more sane than a quarter of a century ago, still are human and are likely to dig up some unusual pet questions to be answered by those taking the examination. This old reliable book has most of the answers.

PROGRAM
ANNUAL MEETING OF THE GEORGIA SOCIETY
OF OPHTHALMOLOGY AND OTOLARYNGOLOGY
 Friday and Saturday, March 3 and 4, 1950 at
GENERAL OGLETHORPE HOTEL
 Wilmington Island, Savannah, Ga.

FRIDAY, MARCH 3

- 8:30—(All day) Registration.
 9—Motion picture: High Speech motion picture of the Human Larynx.
 9:20—Case Report: "Cysts of the Larynx," Dr. Paul Keller, Lawson VA Hospital, Chamblee, Ga.
 9:30-10:30—Dr. Horton: Treatment of the Dizzy Patient.
 10:40-11:40—Dr. Converse: Treatment of Acute Maxillo-facial Trauma.
 11:50-12:50—Dr. Lynch: Carcinoma of the Larynx and Methods of Approach including Lynch Suspension. Lunch.
 2:00-3:00—Dr. Wiener: Medical Ophthalmology.
 3:10-4:10—Dr. Berliner: Slit Lamp Microscopy.
 4:20-5:20—Dr. Hughes: Lid Reconstruction.
 6:00—Reception.
 7:00—Shore Dinner.
 9:30—General Oglethorpe's Famed Turtle Races.

SATURDAY, MARCH 4

- 9:00—Motion picture.
 9:15—Case Report: "Oxy-cephaly," Dr. Morgan Raiford, Clay Memorial Eye Clinic, Atlanta, Ga.
 9:30-10:30—Dr. Berliner: Slit Lamp Microscopy.
 10:40-11:40—Dr. Hughes: Personal Procedures in Ophthalmology.
 11:50-12:50—Dr. Wiener: Surgical Ophthalmology. Lunch.
 1:45-2:00—Case Report: "Osteo-myelitis of the Skull with Sequestration of the Otic Capsules," Dr. Ralph Arnold, Duke Hospital, Durham, North Carolina.
 2:00-3:00—Dr. Converse: Rhinoplasty.
 3:10-4:10—Dr. Horton: Headaches—Common varieties and their treatment.
 4:20-5:20—Dr. Lynch: Radical External Sinus Operations.
 Spare time entertainment—Yachting parties, fishing parties, golfing contests.
 Lecturers—Milton L. Berliner, M.D., New York City; Bayard T. Horton, M.D., Rochester, Minnesota; Mercer G. Lynch, M.D., New Orleans, La.; John M. Converse, M.D., New York City; Meyer Wiener, M.D., Coronado, Calif.; Wendell L. Hughes, M.D., Hempstead, N. Y.
 Officers—Lester A. Brown, M.D., Atlanta, president; William L. Barton, M.D., Macon, vice-president; Braswell E. Collins, M.D., Waycross, secretary and treasurer.
 Committee on Local Arrangements—Stacy C. Howell, M.D., Atlanta; James T. King, M.D., Atlanta; George H. Lang, M.D., Savannah; John K. Train, Jr., M.D., Savannah; James R. Paulk, M.D., Moultrie.

NEW BOOKS

Electrocardiography—Fundamentals and Clinical Application: By Louis Wolff, M. D., Visiting Physician, Consultant in Cardiology and Chief of the Electrocardiographic Laboratory, Beth Israel Hospital; Associate in Medicine, Harvard Medical School. 187 pages with 110 figures. Philadelphia and London: W. B. Saunders Company, 1950. Price \$4.50.

This small book will be helpful to all clinicians and electrocardiographers as well. It will answer many of the present-day questions regarding the value and interpretation of the electrocardiogram.

* * *

Clinical Pathology—Application and Interpretation: By Benjamin B. Wells, M.D., Ph.D., Professor of Medicine, University of Arkansas School of Medicine, Little Rock, Arkansas. 397 pages with 32 figures. Philadelphia and London: W. B. Saunders Company, 1950. Price 6.00.

This book of 397 pages should serve as a useful

reference in making proper evaluations of what can be done, or what has been done, in the clinical laboratory.

* * *

Human Growth. The Story of How Life Begins and Goes On. Based on the Educational Film of the Same Title. By Lester F. Beck, Ph.D., Associate Professor of Psychology, University of Oregon. With the Assistance of Margie Robinson, M.A. Cloth. Price \$2. Pp. 124, with illustrations. Harcourt, Brace and Company, 383 Madison Avenue, New York 17, N. Y., 1949.

This little book is well written, its reading matter is dignified and to the point, and the book can be used by all age groups.

* * *

From the Hills: An Autobiography of a Pediatrician. By John Zahorsky, M.D. Cloth. Price \$4. Pp. 338. The C. V. Mosby Company, St. Louis, 1949.

This autobiography by a pioneer American pediatrician is excellent in every way. May he live long and be happy.

* * *

Primer of Allergy. A Guidebook for Those Who Must Find Their Way Through the Mazes of This Strange and Tantalizing State. By Warren T. Vaughan, M.S., M.D., Richmond, Virginia. With illustrations by John P. Tillery. Third edition revised by J. Harvey Black, M.D., Dallas, Texas. Cloth. Price \$3.50. Pp. 175, with illustrations. The C. V. Mosby Company, St. Louis, 1950.

This book, while small, covers a wide range discussion of allergy. It should be in the library of every physician, and in public libraries as well.

COUNTIES REPORTING FOR 1950

Appling County Medical Society

President—James A. Bedingfield, Baxley
 Vice-President—J. T. Holt, Baxley
 Secretary-Treasurer—J. B. Brown, Jr., Baxley

* * *

Banks County Medical Society

Member—J. S. Jolley, Homer

* * *

Brooks County Medical Society

President—Harry A. Wasden, Quitman
 Vice-President—A. B. Jones, Jr., Quitman
 Secretary-Treasurer—Walter G. Thwaite, Quitman
 Delegate—L. A. Smith, Quitman
 Alternate Delegate—Walter G. Thwaite, Quitman

* * *

Burke County Medical Society

President—W. R. Lowe, Midville
 Vice-President—W. W. Hillis, Sardis
 Secretary-Treasurer—D. L. Butterfield, Waynesboro
 Delegate—J. M. Byne, Jr., Waynesboro
 Alternate Delegate—D. L. Butterfield, Waynesboro

* * *

Carroll-Douglas-Haralson Medical Society

President—Steve Worthy, Carrollton
 Vice-President—O. W. Roberts, Carrollton
 Secretary-Treasurer—E. V. Patrick, Carrollton
 Delegate—Roy L. Denney, Carrollton
 Alternate Delegate—D. S. Reese, Carrollton
 Censors: J. H. Pritchett, Jr., J. Ernest Powell, Jr., and Thomas E. Reeve, Jr.

* * *

Georgia Medical Society

(Chatham County)

President—H. M. Kandel, Savannah
 President-Elect—L. B. Dunn, Savannah
 Vice-President—L. M. Freedman, Savannah
 Secretary-Treasurer—Sam Younblood, Jr., Savannah
 Delegates—John L. Elliott, Ruskin King and Ralph O. Bowden
 Alternate Delegates—Oscar H. Lott, Harold M. Smith, and Joseph Pacifici

Clayton-Fayette Medical Society

President—J. L. Robak, Jonesboro
 Vice-President—J. R. Wallis, Lovejoy
 Secretary-Treasurer—T. J. Bussey, Fayetteville
 Delegate—Y. R. Coleman, Jonesboro

* * *

Dougherty County Medical Society

President—J. Z. McDaniel, Albany
 Vice-President—E. S. Armstrong, Albany
 Secretary-Treasurer—Paul T. Russell, Albany
 Delegate—Paul T. Russell, Albany
 Alternate Delegate—W. F. McKemie, Albany
 Censors: J. M. Barnett, J. C. Keaton and J. A. Redfearn

* * *

Emanuel County Medical Society

President—S. S. Youmans, Swainsboro
 Vice-President—R. G. Brown, Swainsboro
 Secretary-Treasurer—H. W. Smith, Swainsboro
 Delegate—D. D. Smith, Swainsboro
 Alternate Delegate—C. E. Powell, Swainsboro
 Censors—S. S. Youmans, R. G. Brown, and C. E. Powell.

* * *

Glynn County Medical Society

President—T. V. Willis, Brunswick
 Vice-President—H. L. Moore, Brunswick
 Secretary-Treasurer—T. H. Johnston, Brunswick
 Delegate—Thomas W. Collier, Brunswick
 Alternate Delegate—S. P. McDaniel, Brunswick
 Censors—Herbert Kirchman, Ira G. Towson and Louis A. Valente

* * *

Habersham County Medical Society

President—D. H. Garrison, Clarkesville
 Vice-President—C. T. Hardman, Tallulah Falls
 Secretary-Treasurer—George T. Nicholson, Cornelia
 Delegate—J. L. Walker, Clarkesville
 Alternate Delegate—George T. Nicholson, Cornelia
 Censors—Joe J. Arrendale, and B. J. Roberts

* * *

Hall County Medical Society

President—John M. Hulsey, Jr., New Holland
 Vice-President—Ben P. Gilbert, Gainesville
 Secretary-Treasurer—C. W. Whitworth, Gainesville
 Delegate—Billy S. Hardman, Gainesville
 Alternate Delegate—H. E. Valentine, Jr., Gainesville
 Censors—Derrell C. Simons, W. Raleigh Garner and C. W. Whitworth

* * *

Henry County Medical Society

President—R. V. Brandon, McDonough
 Vice-President—G. R. Foster, Jr., McDonough
 Secretary-Treasurer—H. C. Ellis, McDonough

* * *

Macon County Medical Society

Secretary-Treasurer—Thomas M. Adams, Montezuma

* * *

Meriwether-Harris Medical Society

President—H. C. Jackson, Manchester
 Vice-President—Stuart Raper, Warm Springs
 Secretary-Treasurer—R. B. Gilbert, Greenville
 Delegate—C. E. Irwin, Warm Springs
 Alternate Delegate—Stuart Raper, Warm Springs

* * *

Mitchell County Medical Society

President—C. L. Howard, Pelham
 Vice-President—C. A. Stevenson, Camilla
 Secretary-Treasurer—D. P. Belcher, Pelham
 Delegate—J. C. Brim, Pelham
 Alternate Delegate—M. W. Williams, Camilla

* * *

Morgan County Medical Society

President—J. H. Nicholson, Madison
 Secretary-Treasurer—W. C. McGeary, Madison

Delegate—W. C. McGeary, Madison
 Alternate Delegate—J. H. Nicholson, Madison

* * *

Polk County Medical Society

President—J. E. Griffith, Rockmart
 Vice-President—W. H. Blanchard, Cedartown
 Secretary-Treasurer—W. H. Lucas, Cedartown
 Delegate—W. H. Lucas, Cedartown
 Alternate Delegate—J. E. Griffith, Rockmart
 Censors: J. E. Griffith, W. H. Lucas and W. H. Blanchard

* * *

Randolph-Terrell Medical Society

President—Ernest F. Daniel, Dawson
 Vice-President—Robert B. Martin, III, Cuthbert
 Secretary-Treasurer—W. G. Elliott, Cuthbert
 Delegate—Robert B. Martin, III, Cuthbert
 Alternate Delegate—R. B. Quattlebaum, Fort Gaines
 Censors: J. C. Tidmore, A. R. Sims, and F. S. Rogers

* * *

Rockdale County Medical Society

Secretary-Treasurer—Harvey E. Griggs, Conyers

* * *

Tattnall County Medical Society

President—J. M. Hughes, Glennville
 Vice-President—L. V. Strickland, Cobbtown
 Secretary-Treasurer—A. G. Pinkston, Jr., Glennville
 Delegate—A. G. Pinkston, Jr., Glennville
 Censors—A. G. Pinkston, Jr., J. C. Collins, and R. L. Jelks

* * *

Telfair County Medical Society

President—F. R. Mann, Jr., McRae
 Vice-President—F. A. Smith, Jr., McRae
 Secretary-Treasurer—F. R. Mann, Sr., McRae
 Delegate—S. T. Parkerson, McRae
 Alternate Delegate—C. J. Maloy, Milan
 Censors—F. R. Mann, Sr., W. H. Born, and C. J. Maloy

* * *

Tift County Medical Society

President—Richard K. Winston, Tifton
 Vice-President—Robert E. Jones, Tifton
 Secretary-Treasurer—Tom L. Edmondson, Tifton
 Delegate—Eugene M. Flowers, Tifton
 Alternate Delegate—Carlton A. Fleming, Tifton

* * *

Walton County Medical Society

President—M. W. Anderson, Social Circle
 Vice-President—Lynn M. Huie, Monroe
 Secretary-Treasurer—Harry B. Nunnally, Monroe
 Delegate—Charles S. Floyd, Loganville
 Alternate Delegate—Samuel J. DeFreese, Monroe

* * *

Ware County Medical Society

President—W. A. Hendry, Blackshear
 Vice-President—W. C. Calhoun, Waycross
 Secretary-Treasurer—Leo Smith, Waycross
 Delegate—W. L. Pomeroy, Waycross
 Alternate Delegate—Leo Smith, Waycross
 Censors—H. A. Seaman, W. A. Hendry, and W. M. Flanagan

* * *

Wilcox County Medical Society

President—V. L. Harris, Rochelle
 Vice-President—Wm. P. Durham, Abbeville
 Secretary-Treasurer—J. D. Owens, Rochelle
 Delegate—V. L. Harris, Rochelle
 Alternate Delegate—J. M. Estes, Abbeville
 Censors: J. D. Owens and J. A. Bussell

* * *

Worth County Medical Society

Secretary-Treasurer—Gordon S. Sumner, Sylvester
 Delegate—J. L. Tracy, Sylvester
 Alternate Delegate—Henry G. Davis, Jr., Sylvester

OBITUARY

Dr. George S. Kerr, aged 42, Dalton physician, died of a heart attack at the Hamilton Memorial Hospital, November 24, 1949. A native of Dalton, the son of Mr. and Mrs. J. H. Kerr, a pioneer family. He graduated from the University of Texas Medical Branch, Galveston, Texas. He interned one year at Southern Pacific Hospital, Houston, Texas, and was examining physician for Southern Pacific Railroad for two years. He practiced medicine two years at Alice, Texas, before moving to Dalton six years ago. He was a member of the Whitfield Medical Society, the Medical Association of Georgia and a fellow of the American Medical Association. He was a member of the First Methodist Church, Dalton. Survivors include his wife; a daughter, Kay Carolyn Kerr; a son, George Stafford Kerr, all of Dalton, his parents, Mr. and Mrs. J. H. Kerr, Houston, Texas. Funeral services were held at the First Methodist Church with the Rev. Paul A. Turner, pastor, officiating, assisted by Dr. S. Wilkes Dendy, pastor of the First Presbyterian Church. Burial was in the Richardson Cemetery, Dalton.

* * *

Dr. William A. Turner, aged 75, outstanding Newnan surgeon for the past 50 years, died at his home following a long illness, January 21, 1950. He was the son of the late William Allen and Josephine Reese Turner, prominent citizens of Newnan. He graduated from the University of the South Medical Department, Sewanee, Tenn., in 1899. Later he studied in England, Germany, and Austria, specializing in surgery. He was admired and respected by countless friends, and held a high position among members of his profession. He was a member of the Coweta County Medical Society, the Medical Association of Georgia, and a fellow of the American Medical Association. Also a member of the Newnan Rotary Club and the Masonic order. He is survived by his wife, the former Miss Annie Kirk Dowdell; two daughters, Miss Annie Dowdell Turner and Mrs. J. G. White, both of Washington, D. C.; one sister and one brother. Funeral services were held at the graveside, with the Rev. J. E. Hannah and the Rev. J. T. Robins officiating. Burial was in Oak Hill Cemetery, Newnan.

TUBERCULOSIS NEWS

The tuberculosis mortality rate for 1947 was the lowest ever recorded in the United States. An even further reduction in the tuberculosis death rate in 1948 is indicated by the estimated rate of 30.3, based on a 10 per cent sample of death certificates. Sara A. Lewis, Pub. Health Rep., April 1, 1949.

* * *

More attention should be directed to the problem of pulmonary tuberculosis in the old, which is often an active process with a high proportion of sputum-positive cases. The onset is insidious, and the symptoms are commonly ascribed to old age. F. J. Hebbert, M.D., *The Lancet*, Aug. 14, 1948.

* * *

There are two aspects to the educational problem (in tuberculosis). First, the getting of knowledge, which is not, after all, a very difficult thing to do . . . We perhaps are sometimes embarrassed by the knowledge we have. The knowledge which we have of tuberculosis is really enormous . . . The second aspect is the difficult problem: making this knowledge effective . . . There are three to educate, the public, the profession, and the patient. William Osler, M.D., *Nat. Tuberc. A. Tr.*, 1905.

* * *

The real purpose of every type of attack we make on tuberculosis is the eventual eradication of the disease from this country. It is the urgent need to eliminate perpetual danger to public health that makes rehabilitation of the tuberculous so important. It is the fact that tuberculosis is perpetuated by transmission from

one person to another that justifies any measures which will not only make a tuberculous person well but also keep him well. Norvin C. Kiefer, M.D., *Nat. Tuberc. A. Tr.*, 1948.

* * *

Ideally, the patient orientation program (in a tuberculosis hospital) should be directed by a physician with the rare combination of the skills and knowledge of the doctor, nurse, psychologist, social worker, rehabilitation specialist, and special services specialist. Responsibility for the program cannot be made an "additional duty" for someone functioning primarily in another area, nor can it be delegated to the novice who is not yet professionally experienced for something "more important". William B. Tollen, Ph.D., VA Pamphlet 10-27, Oct., 1948.

* * *

There is much to recommend the practice of integrating tuberculosis hospital facilities with those of a general hospital. This is especially true when a general hospital possesses central services and resources which can provide for the additional patient load. Indeed, even where separate construction is practicable, it is desirable to consider locating the tuberculosis unit adjacent to the general hospital, thus permitting the use of common facilities. Robert J. Anderson, M.D., *Pub. Health Rep.*, Nov. 5, 1948.

* * *

The proportion of deaths from tuberculosis among people over 45 years of age is steadily increasing. Robert J. Anderson, M.D., *Pub. Health Rep.*, April 1, 1949.

* * *

A roentgenographically normal chest in a person over 40 does not eliminate the possibility of pulmonary tuberculosis developing in the future. Incipient pulmonary tuberculosis in persons over 40 may be much more common than is generally supposed. Aaron D. Chaves, M.D., *Am. Rev. Tuberc.*, May, 1949.

* * *

In the entire United States about 270,000 mental patients are coming back into the community each year. The spread of the disease from those who may have contracted tuberculosis while in mental hospitals therefore becomes a community problem which we cannot afford to ignore. Robert J. Anderson, M.D., *Pub. Health Rep.*, Jan. 7, 1949.

* * *

There can be no isolationism in the field of health. The fight against infectious disease is not a national or racial problem; it is a task for a whole of humanity . . . The all-inclusive objective of any sound tuberculosis programme is the prevention and eventual eradication of tuberculosis from the peoples of the world.—Bull. World Health Organization, 1948.

* * *

In giving the public and the medical profession full information on what has been done with streptomycin in the treatment of tuberculosis, it is vitally important that neither the toxic effects nor the benefits be magnified on the one hand or minimized on the other. James J. Waring, M.D., *J.A.M.A.*, January, 1948.

* * *

We have learned that you cannot put a patient's mind in a cast. The tuberculosis experience is an interesting example of this. The great problem of the tuberculosis sanatorium is people leaving against medical advice. We have been foolish enough to expect patients to rest idly in bed and not to worry, but worries about families, jobs or money, go round and round in their heads until they decide to give up treatment and go home. Howard A. Rusk, M.D., *Nat. Foundation for Infantile Paralysis*.

* * *

The responsibility of the doctor in enabling the patient to gain psychological acceptance of the diagnosis cannot be too strongly emphasized. There is much that

auxiliary medical personnel can do, but all that they do cannot equal what the doctor himself can accomplish in helping the patient to develop a constructive attitude toward his illness. The patient "can take it" from the doctor to a degree that no one else can match. The understanding and assurance the patient receives from the doctor have far more effect in creating a frame of mind conducive to successful hospitalization than any help the patient receives from others. William B. Tollen, Ph.D., VA Pamphlet 10-27, Oct., 1943.

* * *

City-wide x-ray surveys can be conducted with relative economy of means and money. Previous experience in cities already surveyed and preliminary studies of other communities indicate that if present facilities are fully utilized and if newly discovered cases are given realistic disposition, the increased case load of tuberculosis will not present a grave problem to the community. Francis J. Weber, M.D., Ohio Pub. Health, Feb., 1948.

* * *

Ignored tuberculosis progresses. An organized regimen, active treatment, awareness of the possibilities and cooperation are necessary to cure or check the disease. Sarcoidosis may be entirely ignored, and with few exceptions the patient does just as well, or better, than with medical intervention. There is an environmental and family factor in tuberculosis. Great stress is laid on finding the infection source—the contact. Henry E. Michelson, M.D., J.A.M.A., April 17, 1948.

* * *

The body cannot undo the damage wrought by years of tuberculous infection in a few days or even in a few weeks. Many months are required even to "arrest" the disease. H. Corwin Hinshaw, M.D., Nat. Tuberc. A. Tr., 1948.

* * *

Pulmonary tuberculosis is the most serious public-health problem in the Philippines. It exists throughout the islands in epidemic form, and it is estimated that 10 per cent, or more, of the population suffer from it. The leading cause of death, it is responsible for from 15 to 20 per cent of all deaths, and it is one of the leading contributors to the high infant mortality rate. The war not only increased all the predisposing factors, but destroyed most of the islands' means of coping with the disease. Leroy K. Young, M.D., Pub. Health Rep., Feb. 4, 1949.

* * *

The creation of adequate medical service must of necessity be the ultimate product of the co-working of many forces: enlightened local leadership, an informed and cooperative citizenry, a corps of well-trained doctors, and the financial resources necessary to enable these doctors to earn a living and to establish and maintain efficient hospital services. Medicine in the Changing Order, Rep. N. Y. Academy of Med. Comm., The Commonwealth Fund, 1947.

* * *

The new drug, streptomycin, has proved more effective than any other yet discovered in controlling progressive tuberculosis in the lungs and other organs of the body. There are certain limitations and disadvantages in its use, and it is not expected that streptomycin will replace conventional methods of treatment, such as bed rest and the mechanical measures, like pneumothorax, which selectively put diseased tissue at rest. It has appeared so promising, however, that its potentialities must be thoroughly explored. More money is being spent on streptomycin research in the United States today than on any other phase of tuberculosis research.—Edmond R. Long, M.D., Chairman Comm. of Tuberc. Research, N.T.A.

* * *

The clinical and x-ray pictures of virus pneumonia may at times be duplicated by early acute tuberculosis,

and patients diagnosed as having virus infections should not be dismissed until the chest films are entirely clear. David T. Smith, M.D., Am. Rev. Tuberc., April, 1948.

* * *

The efficacy of streptomycin against tuberculous infections has proved that tuberculosis is yet another disease vulnerable to chemotherapeutic attack. Without undue optimism, greater triumphs may be anticipated. Karl H. Pfuetze, M.D., and Marjorie M. Pyle, M.D., J.A.M.A., March 5, 1949.

FOR SALE—Complete Modern Eye, Ear, Nose and Throat equipment in excellent condition. Centrally located in a population of 200,000. Reason, failing health. Write J.F.B., 2571 Mt. Auburn Avenue, Augusta, Ga.

LONG established hospital for immediate sale in South Georgia—Surgeon in charge retiring. Well equipped and fully accredited by College of Surgeons. Nurses home and doctors' apartments joining hospital. Contact Journal Medical Association of Georgia, 478 Peachtree St., N. E., Atlanta, Ga.

FOR SALE—Government surplus Picker X-Ray Machines 30 M. A. New, Mobile Type \$975.00. Also hospital and medical equipment at big savings: Autoclaves, tables, lights and instruments. A. H. Smulian & Co., 680 Washington St., S. W., Atlanta.

ESTES SURGICAL SUPPLY COMPANY

Phone WALnut 1700-1701

56 Auburn Avenue

ATLANTA, GA.

IMPROVED PORTABLE ELECTROCARDIOGRAPH

Sound and Pulse Wave Attachments

Edgar D. Shanks, M.D.

Doctors' Building

Atlanta

Phone: Main 7740

THE JOURNAL

OF THE

MEDICAL ASSOCIATION OF GEORGIA

PUBLISHED MONTHLY under direction of the Council

Vol. XXXIX

Atlanta, Georgia, March, 1950

No. 3

HISTORY OF THE MEDICAL ASSOCIATION OF GEORGIA, 1881-1949

Thirty Second Annual Session

Thomasville, 1881

The transactions of this meeting contain the names of 223 physicians as members of the Association. Dr. J. C. Hardy, of Savannah, was President.

James B. Baird, of Atlanta, read a bill designed to regulate the practice of medicine in Georgia, which, after considerable discussion, was endorsed by the meeting. The bill provided that a committee of seven members should be appointed to direct its passage through both houses of the General Assembly.

J. P. Logan, of Atlanta, chairman of the committee on the claims of Crawford W. Long as the discoverer of anesthesia, presented through the Secretary the following letter from Dr. Robert Battey, a member of the committee, as the final report of the committee, and asked to be discharged:

Rome, Ga., 12th April, 1881

Dear Dr. Logan:

Your letter of the 10th is received. I had an interview with Dr. Marion Sims, in June last, in reference to the movement to secure from Congress a recognition of the claims of Dr. Crawford W. Long, as the original discoverer of surgical anesthesia, and the making of some substantial provision of his family.

Dr. Sims stated to me that his hopes of success were founded upon the personal devotion of Mr. Henri L. Stuart, who had the matter deeply at heart, and possessed leisure, means and enthusiasm to press the claim. With the death of Mr. Stuart, died his hope of success. Dr. Sims expressed the opinion that the claim in the future would be hotly contested, as it had always been in the past, and nothing short of so able and devoted an advocate as Mr. Stuart would stand any chance of success.

Truly yours,

ROBERT BATTEY.

(Note: Stuart, a retired New York lawyer, was a great admirer of Long, and presented Long's portrait to the State of Georgia. He died while on a visit to Athens, and at his request was buried beside Crawford Long).

R. J. Nunn read a paper describing the Paquelin cautery and its use in the treatment of "rachi-algia." A. Sibley Campbell discussed a case of gunshot wound of the abdomen with fecal fistula, spontaneous closure and recovery without operation. He believed quinine and opium, when used, were important factors in the success of the treatment. Thomas R. Wright reported three cases of compound comminuted fracture of the leg treated with success without resorting to

antiseptics.

William F. Holt, of Macon, was elected President for the ensuing year; Eugene Foster, Augusta, and T. M. McIntosh, First and Second Vice Presidents; A. Sibley Campbell, Augusta, Secretary; and R. J. Nunn, Savannah, Censor. The next meeting was to be held in Atlanta.

Thirty Third Annual Session

Atlanta, 1882

The names of 115 members are given as attending this meeting. Dr. Holt presided. Among the papers read were: "The Relative Merits of Humanized and Bovine Vaccine Virus," by Eugene Foster, Augusta; "Hemorrhagic Malarial Fever," by R. M. Brown; "Is Typhoid Fever Contagious?" by W. H. Philpot; and "Fistula-in-ano," by L. M. Jones. DeSaussure Ford, chairman of the committee on surgery, stated that he had requested contributions from the members of his district, and had received none. He asked that the committee be continued, promising better results next year.

It was decided to hold the next meeting in Athens, and the following officers were elected: K. P. Moore, Forsyth, President; A. G. Whitehead, Waynesboro, and F. R. Calhoun, Euahlee, First and Second Vice Presidents; E. C. Goodrich, Augusta, Treasurer. A. Sibley Campbell was continued as Secretary. For the first time in its history, the session lasted three days.

Thirty Fourth Annual Session

Athens, 1883

The report of this meeting is brief. Dr. Moore presided. W. B. Wells read a paper on "Cerebro-spinal Meningitis;" H. J. Williams discussed "The Carbolic Acid and Iodine Treatment of Typhoid Fever." Officers chosen were: A. W. Calhoun, Atlanta, President; R. J. Nunn, Savannah, and M. J. Deadwyler, Elberton, First and Second Vice Presidents; J. A. Gray, Atlanta, Secretary; and E. C. Goodrich, Augusta, Treasurer. Macon was the next place of meeting.

Thirty Fifth Annual Session

Macon, 1884

The Association met in Macon for its three-day session. Ninety-five members were registered as present, and the Board of Censors reported favorably upon the applications for membership of 26 new members. The title of the presidential address of Dr. Calhoun was "School Hygiene in Relation to Its Influence upon the Vision of Children, or School Sanitation."

Among the papers read and discussed were:

"A Case of Empyema Successfully Treated by Free Incisions, Constant Drainage and Antiseptic Injections," by Howard J. Williams, Macon; "Extreme Age No Contraindication for Cataract Extractions," by J. M. Hull, Augusta; "Syphilis as a Sociological Problem," by Eugene Foster, Augusta; "Successful Removal of Uterine Tumor per Vaginum," by J. W. Flanders, Wrightsville; "Plaster Paris Apparatus in the Treatment of Fractures," by W. O'Daniel, Bullard's; "Antiseptics in Ovariectomy and Battey's Operation," by Robert Battey; and "Typhoid and Typho-Malarial Fevers and the Treatment with Acids and Gelsemium," by A. A. Smith, Hawkinsville.

The following officers were chosen for the ensuing year: Eugene Foster, Augusta, President; J. B. Roberts, Sandersville, and W. D. Bissell, Atlanta, First and Second Vice Presidents; John Gerdine, Athens, and Milo Hatch, Tennille, Censors. Savannah was to be the next place of meeting.

Thirty Sixth Annual Session Savannah, 1885

The transactions of the meeting were published only in the Atlanta Medical & Surgical Journal (Old Series, Vol. XXV; New Series Vol. II, No. 3, May 1885, pp. 146-159). Thereafter, the former annual Transactions were continued.

A paper on "Hemorrhagic Malarial Fever," by A. G. Whitehead, Waynesboro, stimulated unusual discussion. The author took the ground that quinine did but very little, if any, good in such cases. He relied mainly upon calomel and chinoidine, and always pushed calomel to ptyalism, after which he used chlorate of potash and muriated tincture of iron. He regarded ptyalism as important, and gave calomel in two-grain doses every hour until specific effect was obtained. H. McHatton, of Macon, stated that calomel might be curative in such cases, but was not prophylactic in all of them. The last patient he had seen had taken thirty grains of calomel in the previous thirty-six hours. In many cases he had found no red blood corpuscles, and considered the condition one of hemoglobinuria rather than hematuria. Significantly he said that Michifara and Celli had described a "microbe" attacking the red blood corpuscles in malarial diseases.

Officers elected for 1885-86 were: R. J. Nunn, Savannah, President; L. B. Alexander, Forsyth, and T. F. Walker, Cochran, First and Second Vice Presidents, James A. Gray, Atlanta, and E. C. Goodrich, Augusta, were to remain as Secretary and Treasurer, respectively, until 1887.

Thirty Seventh Annual Session Augusta, 1886

The Association convened for three days, April 21st, 22nd and 23rd, with President R. J. Nunn in the chair. Seventy members were in attend-

ance, and twenty-five new members were added.

The committee appointed to prevail upon the Legislature to provide anatomical material for medical schools reported that the bill for this purpose had failed to pass. Although the chairman erroneously declared that the bill would never pass, the committee was continued in office. (Many tales were prevalent in those days of the surreptitious manner in which cadavers often were obtained for anatomical study).

The use of alcohol in medicine was exciting much pro and con arguments. The paper of J. P. Logan, of Atlanta, on "The Relation of the Medical Profession to the Uses and Abuses of Alcoholic Liquors" brought out animated discussion. A motion to consider fully the question of the therapeutic value of various preparations of alcoholic liquors was laid on the table.

A committee of thirty-three members was appointed as delegates to the next meeting of the American Medical Association, and such a large group was continued annually for many years. How many committeemen attended the A.M.A. convention was not stated.

The Treasurer reported a balance of \$1.28 on hand. It was voted to meet next in Atlanta, and the following officers were chosen: President, T. O. Powell, Milledgeville; First and Second Vice Presidents, G. W. Mulligan, Washington, and E. H. Richardson, Cedartown; Censor, for the long term, S. B. Hawkins, Americus.

Hunter P. Cooper, Atlanta, presented a paper on "The Treatment of Empyema;" and J. McF. Gaston, Atlanta, discussed "Surgical Relations of the Gallbladder to Obstruction of the Ducts." Dr. Gaston described cholecystoduodenostomy which he had performed on a dog. Robert Battey, Rome, spoke of Lister's carbolic spray which he was using in his ovariectomies. Eugene Foster, Augusta, discussed antiseptic midwifery, while Thomas R. Wright, of the same city, talked about minor operations under cocaine anesthesia. William Abram Love, Atlanta, gave an eloquent memoir on the life of the distinguished Alexander Means, who died in 1833.

Thirty Eighth Annual Session Atlanta, 1887

At this meeting, with Thomas O. Powell presiding, a new Constitution was read, with action on it postponed for another year. One hundred and twenty-five members were present, and 25 new ones elected. As was the custom, different members made reports from their districts on the principal branches of medicine, practice, surgery and obstetrics. Four of these reports were published in the transactions, Surgery in the Third Congressional District, by P. L. Hilsman, Albany; Surgery in the Fifth District, by J. McF. Gaston, Atlanta; Surgery in the Eighth District, by S. C. Benedict, Athens; and Surgery in the Tenth District, by DeSaussure Ford, Augusta.

It was voted to publish Dr. Powell's presidential address on "Heredity and Environment" in the newspapers. Eugene Foster gave an interesting lecture on "Alcoholic Liquors in the Practice of Medicine," while "The Relations of the Medical Profession to the Use and Abuse of Alcoholic Liquors" was the title of the paper read by Joseph P. Logan.

Officers elected were: President, A. G. Whitehead, Waynesboro; First and Second Vice Presidents, A. A. Smith, Hawkinsville, and John Gerdine, Athens; Secretary, elected for five years, James A. Gray, Atlanta; Treasurer, elected for five years, E. C. Goodrich, Augusta. It was voted to hold the next meeting in Rome.

Thirty Ninth Annual Session
Rome, 1888

The opening of this session was marked by inspiring outbursts of eloquence as Robert Battey, speaking for the committee on arrangements, welcomed the Association to Rome. The well-known orator, John Temple Graves, extended a welcome from the City of Rome; and J. Scott Todd, of Atlanta, responded with equally stirring remarks.

Under the presidency of Dr. Whitehead, an interesting three-day meeting was held, with social parties being given by Dr. Battey, and by Dr. J. S. B. Holmes. Floyd W. McRae made a report of more than ordinary importance in stating that the Anatomical Board had been organized according to the requirements of the law passed at the last session of the Legislature, and was working satisfactorily.

A few of the papers read were: "Is the Germ Theory of Disease Rational?" by J. S. Todd, Atlanta, whose answer was "Yes;" "Superinvolution of the Uterus following Trachelorrhaphy," by Virgil O. Hardon, Atlanta; "Antifebrin as an Antipyretic," by P. R. Cortleyou, Marietta; "Antipyrin in Gynecological Practice," by T. S. Dekle, Thomasville; and "Treatment of Hemorrhoids," by Hunter P. Cooper, Atlanta.

Officers selected were: President, J. S. Todd, Atlanta; First and Second Vice Presidents, J. S. B. Holmes, Rome, and E. R. Anthony, Griffin; Secretary (to fill the place of James A. Gray, deceased), K. P. Moore, Macon. The next meeting was to take place in Macon. The total membership at this time was 248.

Fortieth Annual Session
Macon, 1889

It is noteworthy that throughout this meeting no mention was made of the new Constitution which had been proposed a year previously. For the first time, however, there appeared in the Transactions of 1889 reference to the "State Board of Health," and members were urged to use their influence with representatives in the General Assembly providing for such a body.

J. S. Todd presided, and gave a notable address on "Medicine and Longevity." Among the

essays presented were: "Ununited Fracture of the Forearm. Operation by Drilling and Wiring," by W. P. Nicolson, Atlanta; "Abuse of Obstetric Forceps," by L. G. Hardman, Commerce; "Use of Veratrum Viride in Puerperal Convulsions," by C. H. Richardson, Montezuma; "Some Typical Cases of Fever Prevailing in Athens during the last Ten Months," by John Gerdine, Athens. J. S. B. Holmes, Rome, was elected President for the ensuing year; R. O. Engram, Montezuma, and P. R. Cortleyou, Marietta, First and Second Vice Presidents. The meeting place for 1890 was to be Brunswick.

Forty First Annual Session
Brunswick, 1890

In the absence of Dr. Holmes, the meeting was presided over by Vice President R. O. Engram. S. C. Benedict, Athens, read a paper on "Aseptic versus Antiseptic Surgery," the first time such a subject had been brought before the Association, and many members discussed it. Other papers read were: "The Female Urethra, a Source of Trouble liable to be overlooked in our Gynecological Investigations," by K. P. Moore, Macon; "The Importance of Chemical and Bacteriological Examination of the Urine," by H. J. Williams, Macon; and "Stricture of Male Urethra, and some Forms of Neuroses," by R. O. Engram, Montezuma. It was remarkable that papers "sent by mail" were allowed to be read by the Secretary at this meeting and at other meetings.

A. W. Griggs, West Point, was elected President; J. A. Dunwoody, Brunswick, and E. W. Lane, Scarboro, First and Second Vice Presidents. Augusta was the place for the next meeting.

Forty Second Annual Session
Augusta, 1891

The transactions of the Association for 1891 contained the Constitution as adopted in 1873, so the new Constitution offered in 1888 was not accepted. With Dr. Griggs presiding, A. S. Johnson, Bowman, read a paper on "A Successful Case of Laparotomy for Intussusception;" C. C. Fowler, Rome, spoke on "Battey's Operation"; and Thomas D. Coleman, Augusta, discussed in a paper, "Treatment of Phthisis Pulmonalis." Arthur C. Davidson, Sharon, presented "La Grippe: Its Etiology, Clinical History and Treatment," which was the first time this disease, then so prevalent, was brought to the attention of the Association. Dr. Davidson stated that the condition had prevailed almost universally throughout Middle Georgia, and that probably 90 per cent of all the people, white and black, had been attacked. He claimed that Georgia's famous orator, Henry W. Grady, had died in 1889 of the disease, although the usual cause of Grady's death was given as pneumonia.

Officers for 1892: President, G. W. Mulligan, Washington; First and Second Vice Presidents,

J. M. Hull, Augusta, and Mark H. O'Daniel, Milledgeville, Secretary, Dan H. Howell, Atlanta. Columbus was chosen for the next place of meeting.

Forty Third Annual Session
Columbus, 1892

The meeting was called to order by the president, G. W. Mulligan. The chairman of the Program Committee stated that they had sent 2,500 circulars to members of the Association soliciting scientific contributions in order to arrange a program for the meeting. As a result the committee reported forty-three papers.

Among the papers which were read were: "Cough: Some of Its Causes and Treatment," by C. D. (later known as Dunbar) Roy, Atlanta; "The Relation Between Skin Diseases and the General Health," by M. B. Hutchins, Atlanta; "Plaster Paris in Surgery," by W. F. Westmoreland, Atlanta; "Some Remarks on Tonsil Excisions, with Presentation and Description of New Instruments," by A. G. Hobbs, Atlanta; "Extirpation of the Rectum for Carcinoma," by J. McF. Gaston, Atlanta; and "The Treatment of Hemorrhoids by Carbolic Acid Injections," by J. W. Hallum, Carrollton.

This was the first time in the history of the Association that such matters were discussed as skin diseases, plaster of Paris, tonsillectomy, extirpation of the rectum for carcinoma, and the treatment of hemorrhoids by carbolic acid injections. Two papers were read on "Typhlitis," the forerunner of appendicitis, but they were not published in the Transactions.

The transactions of the year contained obituaries of several physicians who had been distinguished and useful members of the Medical Association of Georgia. Among these were Henry Frazer Campbell, a native Georgian and an alumnus of the Medical College of Georgia, who died in 1886. The number of important medical offices he held, and number of valuable and original papers he wrote have scarcely been exceeded by any other member, before or after his time. In 1885 he became the first physician of the State to be elected President of the American Medical Association.

Officers elected for the ensuing year were: President, A. A. Smith, Hawkinsville; First and Second Vice Presidents, George J. Grimes, Columbus, and R. H. Taylor, Griffin; Treasurer, E. C. Goodrich, Augusta. The next meeting was to be held in Americus.

Forty Fourth Annual Session
Americus, 1893

Papers presented at this convention were: "Puerperal Eclampsia and Its Treatment," by J. I. Darby, Americus; "Contagiousness of Consumption," by J. G. Hopkins, Thomasville; "Stone in the Bladder, with Report of Cases," by F. W. McRae, Atlanta; "A Case of Multiple Neuritis" (alcoholic), by Mark H. O'Daniel, Mil-

ledgeville; and "A Board of Medical Examiners: The State's Medical Duty," by Luther B. Grandy, Atlanta. In the last paper Dr. Grandy brought to the attention of the Association for the first time the timely subject of a State Board of Medical Examiners, which had not been mentioned before.

Dr. A. A. Smith presided. Atlanta was chosen for the next meeting. Officers chosen were: President, W. H. Elliott, Savannah; First and Second Vice Presidents, G. T. Miller, Americus, and H. McHatton, Macon; Secretary, Dan H. Howell, Atlanta; Treasurer, E. C. Goodrich, Augusta.

Forty Fifth Annual Session
Atlanta, 1894

The meeting was called to order by the President, W. H. Elliott, of Savannah. A large and varied program was submitted. The number of members in attendance was not stated.

For the first time since the naming of "appendicitis" by Reginald Fitz, in 1886, a paper on the subject was read before the Association, the speaker being Floyd W. McRae, of Atlanta. Extended discussion followed, and many essays with similar titles were to be heard in the years to come. Dr. Richard Douglas, of Nashville, Tennessee, addressed the meeting on "Surgical Shock." W. B. Gilmer, Macon, presented a paper on "Drainage of the Peritoneal Cavity with the Use of the Siphon Pump." The title of the paper of R. P. Cox, of Rome, was "Sacrificial Surgery of the Ovaries, Tubes and Uterus." J. M. Hull, of Augusta, discussed "Foreign Bodies in the Larynx."

Dr. H. E. Stafford, of New York City, spoke on "The Extraction of Clear Lenses for Myopia." Among other essays read were: "A Plea for the Closer Recognition of Dermatology as a Specialty," by Bernard Wolff, Atlanta; "Phlegmasia Alba Dolens," by George H. Noble, Atlanta; "Trephining in Head Injuries, with Paralysis in the Opposite Arm, Followed by Fungus Cerebri," by R. M. Harbin, Calhoun.

Officers elected for 1895 were: President, W. F. Westmoreland, Atlanta; First and Second Vice Presidents, R. H. Taylor, Griffin, and William Tate, Tate. The Secretary and the Treasurer held over. The invitation of Savannah to entertain the next meeting was accepted.

Forty Sixth Annual Meeting
Savannah, 1895

The meeting, at the DeSoto Hotel, was called to order by the President, W. F. Westmoreland. Several instructive papers were presented on subjects for the first time before the Association: "Urinalysis," by Louis H. Jones, Atlanta; "Graves' Disease, with Cases," by J. M. Hull, Augusta; "Ligation of the External Carotid Artery as a Preliminary to, and Coincident with, Operations Upon the Jaws," by W. P. Nicolson, Atlanta. Thirty-one papers were "read by title," which was more than were actually read. This

situation showed the increasing necessity for a House of Delegates which could conduct the business of the Association, and allow more time for scientific considerations.

J. S. B. Holmes, acting for the Committee on Legislation, announced the passage by the Legislature of the bill establishing a Board of Medical Examiners for the State of Georgia. The auditing committee reported a balance of \$763.51 in the treasury, and recommended that the Secretary and the Treasurer be paid \$100 each for their services, and the stenographer be allowed \$130. Augusta was selected for the next meeting, and the following officers were elected: President, Frank M. Ridley, LaGrange; First and Second Vice Presidents, W. H. Doughty, Jr., Augusta, and M. L. Boyd, Savannah; Secretary, R. H. Taylor, Griffin; Treasurer, E. C. Goodrich, Augusta. The matter of combining secretary and treasurer in one office was considered, but no action was taken.

Forty Seventh Annual Session

Augusta, 1896

The opening addresses at the meetings of this period were characterized by a great show of oratory which was not an uncommon talent among the members of the Association. Neither was there any attempt at brevity. Seven pages in fine print were required in the transactions to produce the eloquent speech of Dr. Eugene Foster made as the address of welcome on this occasion. Frank M. Ridley, another magnetic orator, was president. As his concluding sentence Dr. Foster said: "To you, my brethren, worthy successors of the illustrious physicians whom I have just named, to you, worthy members of the grandest and noblest calling on earth, to each of you, in the name of the medical profession of Augusta, in the name of the citizens of this hospitable community, I bid you welcome, thrice welcome, beloved physicians!"

Of 31 essays scheduled on the published program, 12 were actually read, and 11 were "read by title." The scientific program was interrupted frequently by business matters, more or less essential. This situation showed the increasing necessity for a House of Delegates.

Dr. Samuel Lloyd, of New York, read a paper entitled, "Appendicitis," and E. H. Richardson New York, followed with one on "The Medical Side of Typhlitis." The Committee on Prize Essay made its annual report, with the usual statement that no essays had been offered for the prize. George H. Noble, Atlanta, became President for the next year; J. B. Morgan, Augusta, and R. B. Barron, Macon, First and Second Vice Presidents; and E. C. Goodrich was continued as Treasurer. Macon was to entertain the succeeding meeting.

Forty Eighth Annual Session

Macon, 1897

With Dr. Noble presiding, 27 papers were read, although the titles of 62 appeared on the

official program. Stonewall Jackson's surgeon, Dr. Hunter McGuire, of Richmond, Virginia, gave a paper entitled "Remarks on Appendicitis, with a report of twenty-six cases operated upon during the past twelve months," which elicited much complimentary discussion.

Other papers presented were: "Enterocolitis in Infancy," by M. A. Clark, Macon; "The Treatment of Cutaneous Cancers," by J. B. Morgan, Augusta; "Puerperal Eclampsia," by S. Rumble, Goggansville; "Endemic Influenza, or La Grippe," by W. O'Daniel, Bullards; "Cause and Prevention of Consumption," by J. S. Todd, Atlanta; "Expert Testimony," by John C. Olmsted, Atlanta; "Morphine and Its Effects," by A. K. Bell, Madison; and "A Study of the Refraction of One Thousand Eyes," by C. H. Peete, Macon.

The election of officers resulted as follows: President, J. B. Morgan, Augusta; First and Second Vice Presidents, L. G. Hardman, Harmony Grove (later Commerce); and J. L. Hiers, Savannah. It was voted to hold the next meeting at Cumberland Island, a popular resort at that time. The Transactions of the year contained the names of 300 members of the Association.

Forty Ninth Annual Session

Cumberland Island, 1898

In the absence of the President, First Vice President L. G. Hardman called the meeting to order. The new Constitution and By-Laws were finally adopted. Among the papers heard were: "The Importance of Careful Chemical Analysis in Gastric Disorders," by W. C. Lyle, Augusta; "Mushrooms, a Food and a Poison," by W. H. Elliott, Savannah; "Peritonsillar Abscess," by Dunbar Roy, Atlanta; "Report of Twenty-nine Successful Cases of Tracheotomy for Foreign Bodies in the Air Passages," by W. F. Westmoreland, Atlanta; and "Hysteria," by A. A. Davidson, Augusta.

Although the Spanish-American War was being fought in 1898, no mention of it occurs in the Transactions. Several members were with the Medical Corps, among them Major Edward C. Davis.

The x-ray was given to the world by Roentgen in November, 1895; it was first seen in Georgia at the University of Georgia in January, 1896; and papers on the epochal discovery were first presented before the Medical Association of Georgia at this meeting, in 1898. The papers read were: "A Rare Form of Bone Atrophy Following an Ununited Fracture, as seen by the x-ray," by Eugene Corson, Savannah; and "A Supernumerary Cervical Rib—A Deception by Skia-graphy," by Howard J. Williams, Macon. In his discussion Dr. Williams declared that the x-ray he was reporting had been shown at the meeting of the Association the previous year, in 1897, but the Transactions for the year contained no such report.

Howard J. Williams, Macon, was elected President; and J. G. Hopkins, Thomasville, and

I. H. Goss, Athens, First and Second Vice Presidents. The Association accepted the invitation of Macon to meet in that city the following year.

Fiftieth Annual Session

Macon, 1899.

This assemblage marked the semi-centennial of the organization of the Association, which had occurred in Macon fifty years previously. Dr. Howard Williams presided, the eloquent Judge Emory Speer, of Macon, delivering the address of welcome. As his presidential speech Dr. Williams read an inspiring original poem directed "To the Surviving Members of the First Meeting of the Medical Association of Georgia," several of whom were present.

Typhoid fever was a common and serious disease at this time, and there were animated discussions as to its treatment. Papers read were: "The Eliminative and Antiseptic Treatment of Typhoid Fever," by T. Virgil Hubbard, Atlanta; "Infant Feeding in Health and Disease," by Gilman Robinson, Atlanta; "Seven Cases of Diphtheritic Croup. Two Aborted, and Five Cured by Antitoxin and Intubation," by R. M. Harbin, Rome; "The Endoscopic Treatment of Chronic Urethritis," by W. L. Champion, Atlanta; "Mitral Stenosis, by M. F. Carson, Griffin; "Surgical Treatment of Empyema," by W. S. Elkin, Atlanta; "Case of Gunshot Wound of the Abdomen," by Hunter P. Cooper, Atlanta; and "Asphyxia Neonatorum," by C. H. Richardson, Montezuma.

Floyd W. McRae, Atlanta, was elected President; and St. J. B. Graham, Savannah, and H. B. McMaster, Waynesboro, First and Second Vice Presidents. Atlanta was chosen for the next place of meeting.

Fifty First Annual Session

Atlanta, 1900

The Association was called to order by the President, Floyd W. McRae. In delivering the address of welcome Hon. Fulton Colville called attention to the fact that if it had not been for a Governor's veto the right to practice in Georgia would have been granted osteopaths the previous year.

Among the papers read were: "Hydrophobia and the Necessity for a Pasteur Institute in Georgia," by Henry R. Slack, LaGrange; "Hemorrhage Occurring Before the Menopause," by E. C. Davis, Atlanta; "The Use of Spectacles," by A. W. Stirling, Atlanta; "Diseases of the Stomach," by Edgar J. Spratlin, Forsyth; "The Duty of the Medical Profession and the State to Christian Science Healers," by P. R. Cortleyou, Marietta; "The Necessity for the Use of the Microscope in the Diagnosis of Malaria," by E. E. Murphey, Augusta; and "Some of the Uses of *Veratrum viride*," by J. E. Mangum, Reynolds.

Officers elected were: President, Samuel C. Benedict, Athens; First and Second Vice Presidents, R. M. Harbin, Rome, and L. V. Lockhart,

Maysville; Secretary, L. H. Jones, Atlanta. The following annual meeting was voted to Augusta.

Fifty Second Annual Session

Augusta, 1901.

The session was called to order by the President, S. C. Benedict. Several matters, mentioned in the report of the Committee on Public Legislation, provoked considerable discussion. Among these were a bill designed to create a State Board of Health, and the efforts of the osteopaths to gain recognition. The report of the committee on the establishment of a Pasteur Institute also was given much attention.

Some of the papers presented were: "Excision in Tuberculosis of Joints—Hips and Wrists," by H. J. Williams, Macon; "Hysterectomy with Interesting Complications," by J. G. Earnest, Atlanta; "Caesarean Section," by E. C. Davis, Atlanta; "Lung Injuries," by D. A. N. Thomas, Jersey; "Epidemic Sore Throat," by L. J. Sharp, Harmony Grove; "Bottle Fed Babies," by W. Z. Holliday, Augusta; and "Yellow Atrophy of the Liver," by T. E. Oertel, Augusta. Dr. George R. Fowler, of Brooklyn, New York, gave a dissertation on "Internal Derangements of the Knee-joint, with Report of Three Cases of the Removal of the Internal Meniscus, or Semi-lunar Cartilage."

Officers chosen were: President, James B. Baird, Atlanta; First and Second Vice Presidents, Thomas R. Wright, Augusta, and J. D. Chason, Bainbridge; Secretary and Treasurer, Louis H. Jones, Atlanta. This was the second time in the history of the Association that secretary and treasurer were combined in one office. It was decided to meet next in Savannah.

Fifty Third Annual Session

Savannah, 1902

The meeting convened in the historic DeSoto Hotel, where many sessions of the Association have been held. President was J. B. Baird, of Atlanta. The action of the committee on charter incorporating the Association was ratified and approved.

Several papers were read on typhoid fever. Others read were: "Trachoma," by J. M. Crawford, Atlanta; "Ligation of the Femoral Artery for Traumatic Aneurysm," by J. B. Morgan, Augusta; "Some Reasons why we should have a State Board of Health," by E. C. Thrash, Oakland; "The Treatment of Uterine Fibroids," by Virgil O. Hardon, Atlanta; and "Gunshot Wounds of the Intestine," by W. J. Little, Macon.

Dr. F. W. McRae stated that he had received a letter from Dr. George H. Simmons, of the American Medical Association, bringing up the matter of State Associations becoming affiliated with the A.M.A. This was an important proposal which would be acted upon later.

Charles Hicks, Dublin, was elected President for the ensuing twelve months; J. A. Guinn, Conyers, and W. W. Binion, Benevolence, First

and Second Vice Presidents. Columbus was chosen for the next meeting.

Fifty Fourth Annual Session
Columbus, 1903

Charles Hicks, Dublin, presided. Among the papers read were: "Some Observations in 1400 Cataract Operations," by A. W. Calhoun, Atlanta; "Albuminuric Retinitis," by T. H. Mitchell, Columbus; "Summer Complaints of Children," by S. A. Visanska, Atlanta; "Puerperal Insanity," by J. W. Palmer, Ailey; "A Study of a Case of Spinal Curvature; Preliminary Report of a New Operation," by Michael Hoke, Atlanta; and "Gastropnoxis," by J. N. LeConte, Atlanta. Fifteen papers were read by title.

The title of a paper read by Floyd W. McRae was "The Sin of So-called Conservative Medical Treatment in Diseases Requiring Prompt Surgical Intervention." Papers of this kind were becoming more frequent as modern surgery was getting better established as rational successful treatment in cases which before had been sacrificed for want of sufficient knowledge and experience to save them. How the advocates of conservatism in such cases would have delighted to have the sulfa drugs and antibiotics of forty-five years later to cope with many diseases without resorting to surgery!

The next President was to be H. McHatton, Macon; First and Second Vice Presidents, J. H. McDuffie, Columbus, E. C. Thrash, Oakland. Previously many delegates had been appointed to represent the Association at the meeting of the A.M.A., but this year only one delegate was selected, Dr. Floyd W. McRae, Atlanta. Macon was chosen for the next convention.

Fifty Fifth Annual Session
Macon, 1904

The Association convened with President H. McHatton in the chair. The report of the Executive Committee recommending the plan of reorganization as suggested by the American Medical Association was read, and action deferred for one year. A committee of one member from each state senatorial district was appointed to co-operate with the Committee on Medical Legislation in procuring the establishment of a State Health Department.

The program offered one of the largest number of papers in the history of the Association, being 63. So many other matters consumed the time of the sessions that only 32 papers were read. Among these were: "Ectopic Gestation with Report of Complete Operation and Recovery of the Patient," by E. C. Davis, Atlanta; "The Treatment of Cancer," by M. B. Hutchins, Atlanta; "Anesthesia and Anesthetics," by Ralph Thomson, Savannah; "Uncinariasis in Georgia," by Claude A. Smith, Atlanta; "Incurable Headache—Report of Two Cases," by V. D. Lockhart, Maysville; "The Necessity of a State Board of Examiners for Trained Nurses in Georgia," by E. B. Elder, Macon.

Other papers heard were: "Intestinal Obstruction," by C. T. Nolan, Marietta; "Smallpox, with Especial Reference to the Extraordinarily Mild Epidemic of this Disease now prevailing in Georgia," by H. F. Harris, Atlanta; "Report of a Case of Twins of Unequal Size and Age," by W. W. Evans, Higgston; and "The Prevention of Tuberculosis," by T. E. Oertel, Augusta.

The following new officers were installed: President, W. P. Nicolson, Atlanta; First and Second Vice Presidents, M. A. Clark, Macon, and W. Z. Holliday, Augusta. Delegate to the A.M.A., J. B. Morgan, Augusta; the next meeting place to be Atlanta. An unprecedented event occurred in the suspension of a member for five years for verbatim plagiarism.

Fifty Sixth Annual Session
Atlanta, 1905

This meeting, destined to become historic, was called to order by the President, William Perrin Nicolson. The Committee on Tuberculosis made an extensive report telling of the progress which it was making in fighting what was then referred to as the "Great White Plague."

There was active discussion and at times violent disagreement over the adoption of the new Constitution and By-Laws, as proposed by the A.M.A., but they were finally adopted by the close vote of 134 to 111. The arguments became so heated that a former president of the Association, Charles Hicks, of Dublin, resigned from the Association from the floor. His resignation was not accepted, however, and he withdrew it.

The total membership at this time was 823, 104 new names being added at this meeting. Sixty-six essays were on the program, 36 being read. The Treasurer reported a balance of \$582.88 on hand.

J. Cheston King, Atlanta, presented "Report of a Case of Myasthenia Gravis." The title of the article of W. B. Armstrong was "Mucus Colitis;" "Diagnostic and Therapeutic Importance of the Recent Advances in the Examination of Feces," by H. F. Harris, Atlanta; "The Prevention and Treatment of Puerperal Infection," by L. C. Fischer, Atlanta; "Some Remarks on Results of Radical Operation for Hernia," by W. S. Elkin, Atlanta; and "Complications of Chronic Suppuration of the Middle Ear, with Special Reference to Thrombosis of the Lateral Sinus," by C. H. Cunningham, Macon.

Officers chosen were: President, W. Z. Holliday, Augusta; First and Second Vice Presidents, R. P. Izler, Waycross, and C. T. Nolan, Marietta; Secretary-Treasurer, L. H. Jones, Atlanta. And for the first time, in accordance with the provision of the new Constitution, a Councilor was elected from each Congressional District. These were: First District, J. S. Howkins, Savannah; Second District, W. L. Davis, Albany; Third, R. E. L. Barnum, Richland; Fourth, W. L. Fitts, Carrollton; Fifth, E. C. Davis, Atlanta; Sixth, M. A. Clark, Macon; Seventh, A. T. Calhoun,

Cartersville; Eighth, S. C. Benedict, Athens; Ninth, W. B. Hardman, Commerce; Tenth, W. W. Pilcher, Warrenton; Eleventh, J. D. Herrman, Eastman. The salary of the Secretary-Treasurer was fixed at \$600.00 per annum. J. B. Morgan and H. F. Harris were selected as delegates to the A.M.A. Augusta was selected for the next meeting.

Fifty Seventh Annual Session

Augusta, 1906

The Association convened with Dr. W. Z. Holliday presiding. The report of the Committee on Education attracted considerable attention. The regular medical inspection of schools was recommended, as was limitation of the number of pupils which should be assigned to one teacher. Sanitary and moral prophylaxis were emphasized, and a resolution was adopted urging proper instruction to boys and girls separately as to social hygiene and social purity.

For the first time the Council and House of Delegates held meetings, and made reports to the sessions, thus permitting more time for scientific discussions. The House of Delegates met the day before the opening of the sessions, which has been the custom ever since. The salary of the Secretary-Treasurer was raised to \$1,000. Balance in the treasury was \$3,280.29.

Of 78 papers on the program 48 were read. Among these were: "Needed Legislation on Pure Food Laws in Georgia," by O. H. Buford, Cartersville; "Dementia Praecox," by J. W. Mobley, Milledgeville; "A Simple Method of Staining Spirochetes Pallida," by Charles R. Andrews, Atlanta; "The Diagnosis and Treatment of Gallstones," by George R. White, Savannah; "Report of a Case of Addison's Disease," by W. C. Lyle, Augusta; and "A New and Original Simplification of the Present Method of Infant Feeding," by Charles E. Boynton, Atlanta.

J. N. Downey, New Holland, read a "Report of Five Cases of Fracture of the Femur, with Remarks on Treatment and Exhibition of Extension and Counter Extension Apparatus." It is probable that this was the first demonstration before a medical society of an apparatus of this kind: it certainly antedated the "Hawley" table. The article on "Radium" by Frederick G. Hodgson was the first paper read on radium before the Association.

Officers were elected as follows: President, H. H. Martin, Savannah; First and Second Vice Presidents, T. E. Oertel, Augusta, and J. W. Palmer, Ailey; and three delegates to the A.M.A.: T. D. Coleman, Augusta, George R. White, Savannah, and H. F. Harris, Atlanta. Savannah was chosen for the next annual meeting.

Fifty Eighth Annual Session

Savannah, 1907

The meetings were held at the DeSoto Hotel and Tybee Island, with Dr. Martin presiding. The report of the Committee on Tuberculosis was

very complete and offered valuable plans for the control of the disease in Georgia.

Papers read were: "Enterocolitis in Children," by T. J. McArthur, Cordele; "Training of Epileptic and Feeble-minded Children," by Wesley Taylor, Atlanta; "Tetanus," by J. A. Crowther, Savannah; "Tropical Aphthae or Sprue in Georgia," by H. F. Harris, Atlanta; "A Preliminary Report on the Relation of Albuminous Putrefaction in the Intestines to Arthritis Deformans (Rheumatoid Arthritis, Osteo-arthritis): Its Influence upon Treatment," by C. R. Andrews and Michael Hoke, Atlanta; and "Blood Pressure in Health and Disease," by Ralston Lattimore, Savannah. This was the first paper read on blood pressure before the Association. There were several papers read on typhoid fever and tuberculosis.

The new officers were: President, M. A. Clark, Macon; First and Second Vice Presidents, Ralph M. Thomson, Savannah, and Eugene E. Murphey, Augusta. Councilors and Delegates to the A.M.A. were elected, and Fitzgerald chosen for the next meeting.

Fifty Ninth Annual Session

Fitzgerald, 1908

The meeting was called to order by the President, M. A. Clark. The House of Delegates convened five times, and transacted much business. An innovation was the introduction of a scientific exhibit. H. F. Harris, the first Secretary of the State Board of Health, presented a resolution urging the Association to endorse a resolution of the board asking for an annual appropriation of \$3,500 or more to permit the Board to control all matters pertaining to stream pollution. The resolution was adopted, as was another asking the Legislature for more funds for the control of tuberculosis and other diseases.

The following papers were read: "The Necessity for the Proper Treatment for School Children's Eyes," by Dunbar Roy, Atlanta; "The Results of Vaccine Therapy in Acute and Chronic Infections," by J. E. Paullin, Atlanta; "A Favorable Report of the Use of Gonococcic Vaccine," by E. G. Ballenger, Atlanta; "Report of Five Cases of Facial Neuralgia Treated with Injections of Osmic Acid," by C. C. Harrold, Macon; "The Indications for the Mastoid Operation," by Phinizy Calhoun, Atlanta; "Cicatricial Stricture of the Esophagus," by George R. White, Savannah; and "Hip Joint Operation, Removal of the Head of the Femur," by J. T. Gammage, Pine View.

Other papers submitted were: "Significance of Arterial Hypertension—Its Treatment," by Ralston Lattimore, Savannah; "Fractures of the Skull," by W. A. Norton, Savannah; "Drainage in Suppurative Conditions about the Abdomen," by W. S. Goldsmith; "Headache and Neuralgia due to Diseases of the Nose and Accessory Sinuses," by H. M. Lokey, Atlanta; and "Gastroje-

junostomy—Report of Cases,” by E. G. Jones, Atlanta. These essays received liberal discussion.

Officers chosen were: President, T. D. Coleman, Augusta; W. B. Armstrong, Atlanta, and Ralston Lattimore, Savannah, First and Second Vice Presidents. Dr. L. H. Jones having resigned the office of Secretary-Treasurer, which he had filled so long and well, Claude A. Smith, Atlanta, was elected to fill his place. The invitation of Macon to entertain the next meeting was accepted.

Sixtieth Annual Session
Macon, 1909

President Coleman delivered an unusually interesting address, which was followed by a valuable paper on “Medical Organization” by Dr. M. A. Clark. Report of Council showed that 90 County Societies and 10 District Societies were organized, leaving only one district without a society. The total membership was reported as 1200.

Papers read were: “The History of the Modern Treatment of Penetrating Wounds of the Abdomen,” by Thomas R. Wright, Augusta; “How to Abort Acute Gonorrhea,” by W. L. Champion, Atlanta; “Inguinal Hernia Operated on under Local Anesthesia,” by A. G. Little, Valdosta; “Pellagra, with Report of Two Cases,” by Lawrence Lee and Ernest S. Cross, Savannah; “The Success of Local Anesthesia in the Performance of Operation for Radical Cure of Inguinal Hernia,” by W. W. Battey, Augusta; “Prevention of Ophthalmia Neonatorum,” by H. H. Martin, Savannah; “The Common House Fly is the Cause of Typhoid Fever,” by J. W. Palmer, Ailey; and “The Senile Prostate,” by F. W. McRae, Atlanta. So far as the record goes this was the first time papers were read on pellagra, local anesthesia and hypertrophied prostate. The article on the house fly attracted many discussors.

Other articles heard were: “Neurasthenia,” by W. Herbert Adams, Savannah; “Antirabic Serum with Report of Cases,” by J. N. Brawner, Atlanta; “The Value and Limitation of Blood Examinations in the Diagnosis of Diseases Accompanied by Enlargement of the Spleen,” by V. H. Bassett, Savannah; and “Preliminary Report on the Use of Antirabic Serum,” by J. E. Paullin, Atlanta. Thus antirabic serum and enlarged spleen were mentioned for the first time before the Medical Association of Georgia.

Result of the election of officers was as follows: President, T. J. McArthur, Cordele; First and Second Vice Presidents, M. F. Carson, Griffin, and J. R. Shannon, Forsyth; Secretary-Treasurer, Claude A. Smith, Atlanta. The next meeting was to be in Athens.

Sixty First Annual Session
Athens, 1910

With President McArthur presiding, many reports were read, resolutions adopted, and a pro-

posed new Medical Practice Act presented.

Among the papers read were: “Treatment for Chronic Discharging Ears,” by Phinizy Calhoun, Atlanta; “Subparietal Injuries of the Kidney, with Report of a Case Requiring Immediate Nephrectomy,” by C. W. Roberts, Douglas; “Hookworm Eradication,” by L. J. Sharp, Commerce; “Some Remarks on Flatulence,” by George M. Niles, Atlanta; “The Results of an Operation for Suspending the Uterus by the Round Ligaments,” by J. R. B. Branch, Macon; “Simultaneous Catheterization of the Ureters,” by A. L. Fowler, Atlanta; and “The Georgia State Sanatorium,” by Thomas R. Wright, Augusta.

The members of the Association visited Jefferson, Georgia, April 21st, to witness the unveiling of a shaft to Crawford W. Long, donated by Dr. L. G. Hardman, of Commerce, Georgia. Dr. Woods Hutchinson made a notable address supporting the claims of Dr. Long as the discoverer of surgical anesthesia. An attempt had been made for several years by a committee from the Association to raise money for placing a statue of Long in Statuary Hall, Washington, D. C., where it had been voted a place by the State Legislature, but the effort did not succeed. Instead, in 1926, the statue was erected by a non-medical organization, known as the Crawford W. Long Memorial Association.

E. C. Davis, Atlanta, was elected President; J. C. Bloomfield, Athens, and C. H. Richardson, Montezuma, First and Second Vice Presidents; Delegates to the A.M.A., E. E. Murphey, H. F. Harris; Alternates, T. D. Coleman, and Dunbar Roy. Rome was selected for the next meeting.

Sixty Second Annual Session
Rome, 1911

In August, 1911, appeared the first number of the *Journal of the Medical Association of Georgia*, in which monthly periodical the minutes and papers of the Association were to be published hereafter, thus taking place of the Transactions. Dr. W. C. Lyle, of Augusta, Secretary-Treasurer, was Editor, and Dr. W. R. Houston, of Augusta, Associate Editor.

President E. C. Davis called to order the meeting in Rome, when reports were received from the Council and the House of Delegates. Among deceased members eulogized by the Committee on Necrology was Abner Wellborn Calhoun, pioneer oculist of the South. The House of Delegates reported several bills of medical interest which had been passed by the Legislature, and other bills which had not been passed.

Officers elected for the ensuing year were: President, W. L. Fitts, Carrollton; First and Second Vice Presidents, R. M. Harbin, Rome, and T. E. Bradley, Cordele. The next meeting was to take place in Augusta.

Among papers presented were: “The Association of Uncinariasis in Cataracts,” by Phinizy Calhoun, Atlanta; “Salvarsan,” by Edgar G.

Ballenger. Atlanta; "Goiter and Its Surgical Treatment," by W. P. Harbin, Rome; "Report of Cases of Brain Tumors with Autopsies," by E. Bates Block. Atlanta; "Perincal Repair, Complete and Incomplete," by R. R. Kime, Atlanta; "Sambon's New Theory of Pellagra and Its Application to Conditions in Georgia," by Stewart R. Roberts, Atlanta; "The Gallbladder," by J. L. Campbell. Atlanta; "Gas Gangrene, with Report of Two Cases," by C. W. Roberts, Douglas; "Treatment of Pulmonary Tuberculosis by Artificial Pneumothorax," by S. T. Harris, Valdosta; and "Bacilli Carriers and Their Relation to Public Health," by Katherine R. Collins, Atlanta.

Sixty Third Annual Session

Augusta, 1912

The new Journal of the Association carried the minutes of this session and many of the papers which were read. W. L. Fitts presided. The Secretary's report showed that societies existed in 69 counties of the State, and all districts had societies except the twelfth district. No business of especial importance came from the House of Delegates or the Council.

Dr. Hugh H. Young, champion of Crawford Long, gave an interesting discourse. Many good papers were read. Among these were: "The Medical Society and Its Relation to Public Health," by Thomas J. McArthur, Cordele; "The Eugenical Conservation of Man," by A. L. R. Avant, Savannah; "Cerebro-spinal Meningitis," by W. D. Travis, Covington; "A Clinic with Deaf Mute Children," by R. C. Woodard, Adel; "A Consideration of the Subject of Goiter with Especial Reference to Surgical Treatment," by E. G. Jones, Atlanta; "The Importance of Correct Diagnosis of Skin Lesions and Exhibition of a Case of Dermatitis Herpetiformis," by Cosby Swanson, Atlanta; and "The Value of Ureteral Catheterization," by W. F. Shallenberger, Atlanta.

Other papers read were: "Intestinal Resection in Strangulated Inguinal Hernia, with Report of Cases," by W. W. Battey, Jr., Augusta; "Three Cases of Intestinal Obstruction, with Operation," by T. J. Carswell, Waycross; "The Relation of the Eye to Diseases of Other Parts of the Body," by B. H. Minchew, Waycross; "Malaria," by J. C. Holliday, Athens; "The Value of the X-ray in the Diagnosis of Foreign Bodies," by A. B. Elkin, Atlanta; "My Observation and Personal Experience on the Improved Technic of Ether Vapor and the Nitrous-Oxide-Oxygen Anesthetics," by T. J. Collier, Atlanta; "So-Called Neurasthenia—Some Factors Causative and Curative," by Hansell Crenshaw, Atlanta; and "Cystoscopy as an Aid in Surgical Diagnosis," by W. S. Goldsmith, Atlanta.

W. W. Pilcher, Warrenton, was elected President; J. W. Palmer, Ailey, and T. H. Hall, Macon, First and Second Vice Presidents; W. H. Dougherty and T. J. Carlton, Delegates to the A.M.A.; and E. G. Ballenger and T. R. Wright, Alternates.

The next place of meeting was Savannah.

Sixty Fourth Annual Session

Savannah, 1913

This meeting, presided over by President Pilcher, was marked by heated debate over public health matters and the proposed new Medical Practice Act. Many resolutions were introduced, covering different subjects, but no definite action was taken about anything. The Secretary, W. C. Lyle, reported that the Association, in regard to finances and number of members, was in the best condition in its history.

Following were some of the papers read: "The Practice of Medicine and Pharmacy in Georgia and Some Problems Involved," by R. C. Wilson, Ph.C., Professor of Pharmacy, University of Georgia; "The Care of the Eyes of Children While Employed Indoors," by Hugh M. Lokey, Atlanta; "The Offending Tonsil," by W. C. Lyle, Augusta; "A Plea for Psychopathic Wards and Hospitals," by Y. H. Yarbrough, Milledgeville; "Results of Pasteur Treatment in Rabies," by C. B. Greer, Pathologist, State Board of Health; "Medical School Inspection," by Hinton J. Baker, Augusta; and "Raynaud's Disease. Report of Three Cases in the Negro Race," by Lawrence Lee, Savannah.

Other papers read were: "Chronic Nephritis, Dietetics and Treatment," by R. F. Wheat, Amsterdam; "Cerebral Syphilis," by R. C. Swint, Milledgeville; "The Care of the Newborn," by M. A. Clark, Macon; "Acute Mastoiditis, with a Report of Four Cases Treated with Vaccines," by Albert B. Mason, Waycross; "Diagnosis and Treatment of Duodenal and Gastric Ulcers," by W. R. Houston, Augusta; and "Clinical Interpretation and Application of the Wassermann Reaction," by E. G. Ballenger and Omar F. Elder, Atlanta.

Atlanta was chosen for the next meeting, and the following officers were elected: President, Ralston Lattimore, Savannah; First and Second Vice Presidents, J. D. Chason, Bainbridge, and S. R. Roberts, Atlanta; Secretary-Treasurer, W. C. Lyle, Augusta; Delegates to the A.M.A., T. J. Charlton, Savannah, and M. A. Clark, Macon; Alternates, T. R. Wright, Augusta, and C. T. Nolan, Marietta.

Sixty Fifth Annual Session

Atlanta, 1914

The Association met under the presidency of Dr. Ralston Lattimore. At the meeting of the House of Delegates the chairman reported the passage of the Medical Practice Act. The Treasurer stated that there was a balance of \$3,550 in the bank. At this time the Secretary-Treasurer was being paid a salary of \$100 per month.

Papers read were: "Suprapubic Prostatectomy," by W. L. Champion, Atlanta; "Hypernephroma," by Edward A. Wilcox, Augusta; "Treatment and Mortality of Cerebro-spinal Meningitis," by J. E. Paullin, Atlanta; "Whit-

man's Method of Treating Fractures of the Hip," by C. C. Harrold, Macon; "Psychoanalysis," by Hansell Crenshaw, Atlanta; "An Experimental Study of the Aberhalden Test," by Allen H. Bunce, Atlanta; "Report of Two Cases Presenting Symptoms of Mucus Colitis," by G. P. Huguley, Atlanta; and "Cerebro-spinal Syphilis," by W. R. Houston, Augusta.

Officers chosen were: President, W. B. Hardman, Commerce; First and Second Vice Presidents, C. L. Williams, Columbus, and F. D. Patterson, Cuthbert; Delegates to the A.M.A.: M. A. Clark and E. C. Davis; Alternates, C. T. Nolan and F. W. McRae. The next meeting to be held in Macon.

Sixty Sixth Annual Session Macon, 1915

The *Journal* contained no minutes of the meeting of 1915, with Dr. W. B. Hardman presiding. Among essays on the program were: "Interpretation of Roentgenograms in Certain Gastro-intestinal Conditions," by George M. Niles, Atlanta; "Spinal Anesthesia in Surgery, with Report of 927 Cases," by G. Y. Massenbourg, Macon; "Value of X-ray in Diagnosis," by John S. Derr, Atlanta; "Tonsils and the Rheumatic Group," by S. R. Roberts, Atlanta; "Blood Vessel Surgery," by Hugh N. Page, Augusta; "The Causes, Prevention and Correction of Abdominal Adhesions," by W. F. Westmoreland, Atlanta; "Pulsating Exophthalmos," by T. E. Oertel, Augusta; "Concerning the Removal of Foreign Bodies from the Globe by the Electro-Magnet," by Phinizz Calhoun, Atlanta; and "Toxemias of Pregnancy," by G. A. Traylor, Augusta.

In the absence of published minutes the officers elected were not known. The minutes of the meeting of 1916, however, showed that W. S. Goldsmith, of Atlanta, had been elected President, and the next meeting was to be held in Columbus.

Sixty Seventh Annual Session Columbus, 1916

With Dr. Goldsmith presiding, M. M. McCord, of Rome, presented an article on "How We Expect the Ellis Public Health Bill to Benefit Floyd County." The title of the paper by J. O. Elrod, Forsyth, was "A Plea for Regulating the Advertising and Sale of Patent Medicines." Other papers read were "Hydrotherapy," by W. W. Blackman, Atlanta; "The Grave Danger of the Painless Blind Abscess; the Emetin Flash," by Robin Adair, Atlanta; "Acute Torsion of the Ovary in Young Girls, with Report of Two Cases," by H. S. Monroe, Columbus; "Gunshot Wound of the Spinal Cord," by W. L. Cooke, Columbus; "The Acute Abdomen," by W. F. Westmoreland, Atlanta; "Conservation of Tissue, Restoration of Function, Not Removal of Organs, Should be the Aim of Surgery," by F. W. McRae, Atlanta; "Acute Dilatation of the Stomach," by J. T. Rogers, Savannah; "Angina Pectoris,"

by S. R. Roberts, Atlanta; and "Migraine," by J. G. Dean, Dawson.

Officers for 1917 were: J. G. Dean, Dawson, President; J. M. Anderson, Columbus, and C. K. Sharp, Arlington, First and Second Vice Presidents; F. W. McRae, S. R. Roberts, E. C. Davis, J. M. Smith and A. G. Fort, Delegates to the A.M.A. The following meeting was to go to Augusta. An amendment was passed establishing the Committee on Medical Defense, to investigate and defend all suits against the Association and against individual members for civil malpractice. The Association was to pay the expenses of such defense and also pay any judgment rendered against a member.

Sixty Eighth Annual Session Augusta, 1917

This assemblage, presided over by Dr. Dean, was memorable in that on April 2nd, sixteen days before the meeting opened, the United States had declared war against Germany. Talk of war was in the air, and several members present were already in their uniforms, and many more were about to join the service. A resolution was adopted asking members who stayed at home to care for the practice of those who had gone to war and, as far as feasible, return the practice to the member upon his return home.

Sixty-five interesting papers were on the program. Among those read were: "The Importance of Careful Preliminary Examinations Before Surgical Operations," by E. C. Davis, Atlanta; "The Value of the X-ray in Diagnosis of Pathology in the Stomach, Duodenum and Appendix," by John S. Derr, Atlanta; "Observations on the Preparation of Substances for Intraspinal Injection in Syphilis of the Central Nervous System," by Allen H. Bunce, Atlanta; "Southern Surgeons for Southern Soldiers," by Major Charles C. Harrold, Macon; "Hypertension," by Stewart R. Roberts, Atlanta; "Dietetic Treatment of Typhoid Fever," by James E. Paullin, Atlanta; "Treatment of Infantile Paralysis," by Frederick G. Hodgson, Atlanta; and "Emergency Head Surgery," by Charles E. Dowman, Atlanta. Dr. George W. Crile, of Cleveland, delivered an address on the treatment of gallbladder diseases, peptic ulcer and diseases of the thyroid gland.

Officers elected were: Major E. E. Murphey, Augusta, President; A. D. Little, Thomasville, and E. C. Thrash, Atlanta, First and Second Vice Presidents. Major W. C. Lyle continued in office as Secretary-Treasurer. Savannah was chosen for the next meeting.

Sixty Ninth Annual Session Savannah, 1918

The war was a matter for much discussion, and members were urged to join the armed forces. A Committee for Medical Preparedness had been appointed to give information about enlistments, and to aid members to do their part in the conflict. President Eugene Murphey, one

of the first to enlist, was in the chair. Colonel G. E. Bushnell, of the United States Army, spoke, while Major Joseph C. Bloodgood, of Baltimore, addressed the session on "Some Principles Involving the Treatment of Infected Wounds." Major Seale Harris, of Birmingham, also addressed the meeting urging early enlistment of members.

Among papers read were: "The Control of Cancer," by George R. White, Savannah; "Babies, Malaria and Quinine," by W. A. Mulherin, Augusta; "Direct Alcoholization of the Sensory Root of the Fifth Nerve in the Treatment of Tic Douloureux," by H. H. Martin, Savannah; "Papillomata of Gallbladder and a Case of Anastomosis of Biliary Sinus to Intestine," by T. P. Waring, Savannah; "Plastic and Cosmetic Surgery," by E. D. Highsmith, Atlanta; "Ten Years' Experience in the Treatment of Pneumonia," by S. T. R. Revell, Louisville; and "Roentgen Diagnosis of Empyema Simulating Other Diseases," by W. A. Cole, Savannah.

Officers elected were: J. W. Palmer, Ailey, President; George R. White, Savannah, and L. B. Clarke, Atlanta, First and Second Vice Presidents; S. R. Roberts, H. H. Martin, E. C. Thrash and A. G. Fort, Delegates to the A.M.A. The Association accepted the invitation of Atlanta to meet there in 1919.

Seventieth Annual Session

Atlanta, 1919

With Dr. Palmer presiding, Secretary-Treasurer Lyle presented an interesting report showing that the State of Georgia had furnished 750 surgeons to the armed forces in World War I. The majority of these came from the 1,025 members of the Association. It was also stated that 75 per cent of the local secretaries were in uniform. A resolution of appreciation was adopted for the members who had enlisted, for their sacrifice and services.

J. L. Campbell gave the first report of the Committee for the Study and Control of Cancer. Papers read were: "Tonsillar Operations in the Army," by R. R. Daly, Atlanta; "Aspiration of the Pouch of Douglas as an Aid in Differentiating Atypical Cases of Ectopic Pregnancy and Pyosalpinx," by R. A. Bartholomew, Atlanta; "Surgery in a Base Hospital in France," by Lieut. Col. Frank K. Boland, Atlanta; "Ureteral Stricture in Women," by W. F. Shallenberger, Atlanta; and "The Feeding of Sick Babies," by W. A. Mulherin, Augusta.

Dr. George W. Crile, Cleveland, spoke on "Abdominal Surgery;" Lieut. Col. W. W. Babcock, Philadelphia, "Notes on Surgery of the Peripheral Nerves;" W. D. Haggard, Nashville, "Some of the Surgical Lessons of the War;" and Col. Seale Harris, Birmingham, "Food Conditions and Nutritional Disorders in Europe, with especial Reference to Pellagra." Col. Charles Waddell Stiles, of the United States Public Health Service, gave a talk on a new parasite which is

the cause of infection in human beings. The sessions of the second day of the meeting were held in the Red Cross Hall, Fort McPherson, the guests of Col. T. S. Bratton, U. S. Army Medical Corps, Commanding Officer.

Officers chosen were: E. G. Jones, Atlanta, President; W. H. Hendrix, Tifton, and J. M. Smith, Valdosta, First and Second Vice Presidents; A. H. Bunce, Delegate to the A. M. A., E. E. Murphey, Alternate. Macon was chosen for the next meeting.

Seventy First Annual Session

Macon, 1920

Four hundred and thirty-seven members assembled for this good meeting, with President E. G. Jones in the chair. In order to carry out the plans of the Committee on Defense, the annual dues were raised to \$5.00. The President's address on "Some Observations on Medical Education with Particular Reference to Its Present Status in the South" was well received.

Among papers read were: "Snapping Hip with Report of Cases," by M. C. Pruitt, Atlanta; "Medical Aspects of Surgical Patients," by W. H. Lewis, Rome; "Cancer: Its Treatment by Radium," by C. C. Harrold, Macon; "Spinal Anesthesia, with Report of Cases," by W. L. Cooke, Columbus; "Gunshot Wounds of the Chest, and Their Treatment," by T. C. Davison, Atlanta; "The Importance of Ureteral Stricture in Abdominal Diagnosis," by G. Y. Massenberg, Macon; "Treatment of Chronic Osteomyelitis and Bone Sinuses," by Lawson Thornton, Atlanta; "Bone Diseases by the X-ray," by J. J. Clark, Atlanta; and Roentgen-ray Study of the Abdominal Organs following Oxygen Inflation of the Peritoneal Cavity," by George M. Niles, Atlanta.

Dr. William Englebach, of St. Louis, read a paper, by invitation, entitled "Disorders of the Pituitary Gland." Other papers heard were: "Local Anesthesia in Abdominal Surgery, with Synopsis of 33 Cases," by Lon Grove, Atlanta; "Extraction of Foreign Bodies from the Trachea, Bronchi and Esophagus," by C. L. Penington, Macon; "Hypertrophic Stenosis of the Pylorus," by W. W. Battey, Augusta; "Tubal Pregnancy," by W. Frank Wells, Atlanta; and "The Relief of Menorrhagia and Metrorrhagia by Roentgen Treatment," by W. A. Cole, Savannah. Dr. Harvey R. Gaylord, of Buffalo, New York, delivered an address on the "Prevention of Cancer." Hon. Hugh M. Dorsey, Governor of Georgia, reviewed the work done by the Legislature during his administration to further the cause of medical research in the State.

Officers elected were: President, E. T. Coleman, Graymont; First and Second Vice Presidents, T. E. Oertel, Augusta, and Fred L. Webb, Macon; Secretary-Treasurer, Allen H. Bunce, Atlanta, who also became Editor of *The Journal*; Delegates to the A. M. A., E. G. Jones and W. C.

Lyle; Alternates, J. G. Dean and M. A. Clark. The next place of meeting was Rome.

Seventy Second Annual Session
Rome, 1921

The report of this meeting, as recorded in the *Journal of the Association*, was the most complete yet published. Reports of the deliberations of several important standing committees were given in detail, such as the Committee on Medical Defense, Committee on Hospitals, Committee on Health and Public Instruction, and others. The President, Dr. E. T. Coleman, was in the chair.

One session was given over to the unveiling of a monument to Dr. Robert Battey, a distinguished member of the Association, whose home was in Rome. Dr. Howard A. Kelly, of Baltimore, delivered an eloquent address on this occasion. A resolution was passed asking the State Legislature to appropriate \$10,000 for the erection of a statue of Crawford W. Long in Statuary Hall, Washington, D. C., where it had been voted a place by the Legislature. (The Legislature failed to comply with this request on the ground that it had no authority to appropriate money to erect a statue outside of the State of Georgia).

Papers read were: "The Preservation of Health," by Cyrus W. Strickler, Atlanta; "The Illness and Death of Napoleon," by Walter R. Holmes, Jr., Atlanta; "Resumé of Public Health Work for 1920 and 1921," by Joseph P. Bowdoin, Adairsville; "The Relation of Public Health Work to Physicians' Reports," by T. F. Abercrombie, Atlanta; "Plastic Surgery," by E. D. Highsmith, Atlanta; "Report of Case of Double Uterus," by J. T. McCall, Rome; and "Newer Aspects of High Blood Pressure," by Ralston Lattimore, Savannah. Dr. C. C. Bass, of New Orleans, by invitation, spoke on "Quinine in Malarial Control," which was discussed liberally.

Other papers presented were: "Tonsillectomy Under Local Anesthesia," by B. H. Minchew, Waycross; "Some Observations on the Role of the Tooth and Tonsils as a Causative Factor in Systemic Infections," by E. S. Osborne, Savannah; "Sacral Anesthesia," by H. L. Barker, Carrollton; and "The Enuclation of the Eyeball and Its Substitute Operation," by Phinzy Calhoun, Atlanta.

Officers elected as follows: President, E. C. Thrash, Atlanta; First and Second Vice Presidents, H. W. Terrell, LaGrange, and R. M. Harbin, Rome.

Summary of 1881-1921

One of the most important events in the history of the Association during this forty-year period was the inauguration of the House of Delegates. Other bodies of little less importance, established under the sponsorship of the Association, were the State Board of Health, the State Board of Medical Examiners, and the State Anatomical Board. The new Constitution and By-Laws,

adopted in 1905, and suggested by the American Medical Association for all states, gave the State Association closer affiliation with the national organization.

The interesting, memorable era also was marked by conspicuous improvement in the quality of papers presented at the annual sessions and published in *The Journal*. Many of the greatest discoveries in medicine were announced during these exciting years, and received thorough discussion at the meetings. Although Lister gave antiseptic surgery to the world in 1867, it was not universally recognized and adopted for fifteen or twenty years later. Among discoveries and new methods introduced during the period were:

1881—Laveran discovered the malarial parasite.

1882—Koch discovered the tubercle bacillus.

1884—Howard Kelly first used local anesthesia.

1886—Fitz wrote the first paper on appendicitis, and gave the disease its name.

1889—Bier first used local anesthesia.

1895—Roentgen discovered the x-ray.

1897—Ross found the mosquito carrying malarial organisms.

1901—Carroll and Reed found the mosquito carrying yellow fever.

1905—Schaudinn discovered the *Spirochaeta pallida* of syphilis.

1907—Wassermann introduced the serodiagnosis of syphilis.

1909—Ehrlich introduced salvarsan.

1906-1919—Radium therapy introduced by Dominici.

1915-1920—Goldberger and associates revealed avitaminosis as cause of pellagra.

Seventy Third Annual Session
Columbus, 1922

With President E. C. Thrash in the chair, this meeting was very interesting. A notable event was the presentation of buttons to the eighteen living ex-presidents. Since that time every president receives a button on his retirement from office.

A symposium on X-ray and Radium Therapy was presented, as follows: "The Use of Radium in Treatment of Cancer of the Cervix," by O. D. Hall, Atlanta; "Treatment of Leukemia by means of the X-ray," by J. W. Landham, Atlanta; "Results from Six Months' Experience with Radium," by W. L. Cooke, Columbus; "The X-ray Treatment of Uterine Hemorrhage and Fibroid Tumors," by John S. Derr, Atlanta; and "Mention of Various Diseases in which X-ray is of Most Value," by W. F. Jenkins, Columbus.

Other papers heard were: "Syphilis of the Nervous System," by Newdigate Owensby; "Complete Versus Subtotal Hysterectomy," by Garnett Quillian, Atlanta; "Conservatism in Surgery," by Floyd W. McRae, Jr., Atlanta;

"Cholecystectomy versus Cholecystostomy," by T. C. Davison, Atlanta; "Complemental Breast Feeding," by Linton Gerdine, Athens; and "Abscess of the Lung, with Report of Seven Cases," by J. E. Paullin and H. C. (Jake) Sauls, Atlanta; "The Intracutaneous Method of Diagnosis in Hay Fever and Asthma," by Hal Davison, Atlanta; "Interesting Observations in Cataract Extractions Among Confederate Veterans," by Murdock Eguen; "The Ophthalmoscope as an Aid in General Diagnosis," by W. C. Lyle, Augusta; "A Consideration of Eye, Ear, Nose and Throat Conditions at Georgia State Sanitarium," by B. McH. Cline, Atlanta; and "Acute Conditions of the Abdomen Requiring Surgical Interference," by L. C. Fischer, Atlanta.

The following officers were elected: President, J. M. Smith, Valdosta; First and Second Vice Presidents, P. A. Tatum, Columbus, and A. R. Rozar, Macon; Parliamentarian, M. A. Clark, Macon; Delegate to the A.M.A., W. E. McCurry, Hartwell; Alternate, Ralston Lattimore, Savannah. The Treasurer's report showed a balance of \$4,687.10. The next meeting was to be held in Savannah.

Seventy Fourth Annual Session Savannah, 1923

The Journal of the Medical Association for June and July, 1923, contained the most complete reports of the sessions yet published. The proceedings of the House of Delegates and the Council were given in detail, together with the reports of all committees. Several minor changes were made in the Constitution and By-Laws. President J. M. Smith was in the chair.

Among papers read were: "A Study of Symptomatology in Neurosyphilis," by Lewis M. Gaines, Atlanta; "The Important Consideration of Ovarian Tumors of All Types," by T. P. Waring, Savannah; "Use of Sutures in Tonsillectomies," by Julian H. Buff, Atlanta; "The Relation of Tonsils and Adenoids to Growth and Development in Children," by T. D. Walker, Jr., Macon; "Recurrence of the Prostate," by W. L. Champion, Atlanta; "A Consideration of the Kidney Function," by W. W. Jarrell, Thomasville; "Insulin in the Treatment of Diabetes Mellitus," by J. E. Paullin, Atlanta; and "Gastric and Duodenal Ulcer," by Charles Usher, Savannah.

Hugh N. Page, Augusta, read a paper on "Regional Anesthesia;" Charles E. Dowman, Atlanta, "Traumatic Cyst of the Brain;" Lawrence Lee, Savannah, "A Report of Four Cases of Cicatricial Stricture of the Esophagus;" Charles H. Watt, Thomasville, "Pyelonephritis with Report of a Case;" William H. Myers, Savannah, "The Epidemic of Dengue Fever in Savannah in 1922;" and B. H. Wagnon, Atlanta, "Sarcoma of the Back, with Report of Three Cases." At the banquet held at the Tybee Hotel, Dr. Louis M. Warfield, guest speaker, of Ann Arbor, Michigan, delivered an address on "Some

Tendencies in Modern Medicine."

Officers elected were: President, John W. Daniel, Savannah; First and Second Vice Presidents, A. J. Mooney, Statesboro, and H. C. Wheelchel, Douglas; Delegate to A.M.A., J. W. Palmer, Ailey; Alternate, J. N. Brawner, Atlanta. It was voted to hold the next meeting in Augusta. This would be the seventy-fifth, or Diamond Jubilee session.

Seventy Fifth Annual Session Augusta, 1924

The following changes were made in the Constitution and By-Laws at this meeting, over which Dr. J. W. Daniel presided:

1. The Council was made the acting body of the Association in the interim between annual meetings.
2. The House of Delegates will meet on the day preceding the beginning of each annual meeting.
3. On locating or on change of location a member may place his card in the local paper for a period not to exceed one month. He may state whether or not his practice will be limited, but no member may use the word "specialist" in any connection.

Among papers read were: "Acidified Milk with Karo Syrup as an Artificial Feeding for Babies," by W. A. Mulherin, Augusta; "Modified Breast Milk," by W. L. Funkhouser, Atlanta; "Status Thymicus in Children," by W. N. Adkins and W. T. Freeman, Atlanta; "A Study in Tetany," by Cleveland Thompson, Millen; "Intestinal Protozoa," by V. P. Sydenstricker, Augusta; "The Treatment of Bone Tuberculosis," by Lawson Thornton, Atlanta; "Concerning Simple Methods for the Differentiation of Cardiac Arrhythmia," by Edgar D. Shanks, Atlanta; "Adhesions of the Ascending Colon with Obstructive Symptoms; So-Called Chronic Appendicitis," by Lon Grove, Atlanta; and "Cystograms with Air Injection to Demonstrate Intravesical Hypertrophied Prostate," by E. G. Ballenger, O. F. Elder and W. F. Lake, Atlanta.

Other essays heard were: "The Relation of Adherent Prepuce to Epilepsy," by E. Bates Block, Atlanta; "Diabetes," by J. D. Gray, Augusta; "The Treatment of Pneumonia," by Stewart R. Roberts, Atlanta; "Gas Bacillus Infection," by J. K. Quattlebaum, Savannah; and "Report of a Case of Measles Accidentally Transmitted by Blood Transfusion, Pre-erupted Stage," by H. P. Harrell, Augusta.

The following officers were then balloted for and declared duly elected: J. O. Elrod, Forsyth, President; W. A. Mulherin, Augusta, and B. H. Wagnon, Atlanta, First and Second Vice Presidents; Allen H. Bunce, Atlanta, Delegate to the A.M.A., and W. C. Lyle, Atlanta, Alternate. Atlanta was chosen for the next meeting.

Seventy Sixth Annual Session
Atlanta, 1925

This was the best attended meeting in the Association up to this time, more than 650 members being present. A notable event was the first annual meeting of the newly-organized Woman's Auxiliary, with Mrs. James N. Brawnner, of Atlanta, as its first president. It also was interesting that only one essayist on the program was absent, and he was detained at home by an operation for appendicitis. The President, Dr. J. O. Elrod, was in the chair.

Among the papers presented were: "Myxedema," by Henry R. Slack, LaGrange; "Infections of the Biliary Tract Unrelieved by Surgical Intervention," by W. H. Lewis, Rome; "Pellagra and Its Treatment," by L. L. Whiddon, Ocilla; "Intracranial Injuries in the New-Born," by C. H. Richardson, Jr., Macon; "Physiological Pigmentation in the New-Born," by M. Hines Roberts, Atlanta; "Further Observations on the Management of Head Injuries," by J. Calvin Weaver, Atlanta; "Chronic Adhesive Mediastino-Pericarditis, with Review of 150 Cases," by Eugene E. Murphey, Augusta; and "Local Anesthesia in Surgery," by G. Y. Massenburg, Macon.

The program was continued with a paper on "Cancer of the Pancreas and Bile Ducts," by Dan C. Elkin, Atlanta; "History Taking by the General Practitioner," by W. H. Clark, LaGrange; "Hexylresorcinol in Bacillus Proteus Pyelitis," by W. E. McCurry, Hartwell; "The Surgery of Inguinal Hernia," by W. F. Westmoreland; and "The Treatment of Pyelitis," by Walter R. Holmes, Atlanta. Two distinguished guest speakers were on the program. Dr. Edward Francis, of the United States Public Health Service, Washington, D. C., delivered an address on "Tularemia," while Dr. Walter E. Sistrunk, of the Mayo Clinic, spoke on "The Diagnosis of Abdominal Conditions."

Officers were chosen as follows, and Albany selected for the next meeting: President, Frank K. Boland, Atlanta; First and Second Vice Presidents, W. R. Dancy, Savannah, and H. M. Fullilove, Athens; Secretary-Treasurer, A. H. Bunce, Atlanta; Parliamentarian, M. A. Clark, Macon; Delegate to the A.M.A., R. L. Miller, Waynesboro; Alternate, C. W. Roberts, Atlanta.

Seventy Seventh Annual Session
Albany, 1926

For the first time in its history the Association met in Albany, which proved to be well able to take care of the convention. Under the presidency of Dr. Frank K. Boland, the following were some of the papers read: "Sanitation Problems of Small Cities," by J. W. Chambliss, Americus; "Peculiarities of Human Behavior," by Newdigate Owensby, Atlanta; "Report of a Few Cases Illustrating the Fallacy of Indigestion as a Diagnosis," by J. C. Patterson, Cuthbert; "Feeding

the Normal Infant," by R. G. McAliley, Atlanta; "Toxin-Antitoxin," by Benjamin Bashinski, Macon; and "Basal Metabolism Rate in Toxic Goiter," by T. C. and H. M. Davison, Atlanta.

Dr. Charles C. Bass, of New Orleans, addressed the session on "Specific Treatment of Malaria." and Dr. Seale Harris, a former Georgian, of Birmingham, spoke on "Relatively High Fat. Low Carbohydrate and Rich Vitamin Diet in the Treatment of Gastric and Duodenal Ulcer." Other papers read were: "Treatment of Diabetic Coma," by Thomas E. Rogers, Macon; "The Painful Heel," by Theodore Toepel, Atlanta; "Surgical Correction of Facial Deformities," by E. D. Highsmith, Atlanta; "Some Personal Observations in Reference to Deafness," by Dunbar Roy, Atlanta; "Some Essentials in Good Surgical Practice," by Ralph H. Chaney, Augusta; and "Types of Gastric and Duodenal Ulcer and Their Management," by John B. Fitts, Atlanta.

Officers for the ensuing twelve months: President, V. O. Harvard, Arabi; First and Second Vice Presidents, J. A. Redfearn, Albany, and B. H. Minchew, Waycross; Delegates to the A.M.A., E. C. Thrash, Atlanta, and C. W. Roberts, Atlanta; Alternates, J. W. Palmer, Ailey, and B. T. Wise, Plains. Treasurer Bunce's report showed a balance of \$5,667.94 in the bank. The next place of meeting was to be Athens.

Seventy Eighth Annual Session
Athens, 1927

The meeting was called to order by the President, Dr. V. O. Harvard. An important paper was read by M. E. Winchester, of the State Board of Health, entitled, "History of Public Health Work in Georgia," in which he mentioned as the first record of any law pertaining to public health in Georgia an act passed February 5, 1866, for the control of smallpox in the State. It was nine years later before a real State Board of Health was formed. At the regular session of the Legislature, February, 1875, a bill was passed creating such a board. This board died, however, for lack of the appropriation of funds, and another board was not organized until 1903, when H. F. Harris became secretary. The laboratory was begun two years later, and was operated solely by him. The Ellis Health Law, which started functioning in 1914, created a Board of Health in every county in the State.

Dr. Walter W. Young, of Atlanta, presented an article on "The Newer Psychology in its Practical Application to General Medicine;" H. D. Allen, Jr., Milledgeville, read a paper on "Dried Yeast Therapy in Certain Psychoses;" M. A. Fort, State Board of Health, "Popular and Professional Misconceptions Regarding Malaria; and W. W. Anderson, Atlanta, "Rickets."

"The Use of Banana Diet in the Treatment of Chronic Intestinal Indigestion in Children" was

read by Joseph Yampolsky, Atlanta; "Diagnosis of Syphilitic Bone Lesions" by J. J. Clark, Atlanta; "Treatment of Superficial Malignancies by Combined Method," by J. W. Landham, Atlanta; "The Necessity of Pyelograms in Urological Diagnosis" by Wallace L. Bazemore, Macon; "Chronic Duodenal Ileus," by J. K. Quattlebaum, Savannah; "The Present Status of Stomach and Duodenal Surgery as Observed in Various American and European Clinics," by Thomas Harrold, Macon; and "Supra-condyloid Fracture of the Elbow," by Grady N. Coker, Canton.

Officers for the following year were elected as follows: President, William A. Mulherin, Augusta; First and Second Vice Presidents, H. M. Fullilove, Athens, and Cleveland Thompson, Millen; Delegate to the A.M.A., Allen H. Bunce; Alternate, W. R. Dancy. Savannah was the next place of meeting.

Seventy Ninth Annual Session
Savannah, 1928

This meeting, presided over by W. A. Mulherin, was marked by the inauguration of the A. W. Calhoun Lectureship. Dr. George E. deSchweinitz, distinguished ophthalmologist of Philadelphia, was the speaker, the title of his address being "Headache." Dr. G. V. I. Brown, of Milwaukee, spoke on "Plastic Surgery." Several members gave clinics.

Among the papers read were: "Pulmonary Aspergillosis," by E. F. Wahl, Thomasville; "The Prognosis of Tumors with Special Reference to Cell Type and Its Influence on Treatment," by Everett L. Bishop, Atlanta; "Complete Prolapse of the Rectum," by W. E. Person, Atlanta; "Urinary Antiseptics," by M. L. Boyd, Atlanta; "What Is Needed to Improve the Practice of Obstetrics?" by J. R. (Bert) McCord, Atlanta; "Medical Economics," by W. P. Harbin Rome; "The Treatment of the Anemias with Liver Fraction," by Glenville Giddings, Atlanta; and "Routine Circumcision at Birth," by T. B. Gay, Atlanta. Dr. Clifford G. Grulee, Clinical Professor of Pediatrics, University of Chicago, gave an address on "Bone Lesions in Children."

Officers were chosen as follows: President, C. K. Sharp, Arlington; First and Second Vice Presidents, W. E. McCurry, Hartwell, and M. Hines Roberts, Atlanta; Parliamentarian, M. A. Clark, Macon; Delegates to the A.M.A., William H. Myers, Savannah, and E. C. Thrash, Atlanta; Alternates, W. A. Mulherin, Augusta, and C. W. Roberts, Atlanta. For the first time the Association elected a President-Elect, who was W. R. Dancy, of Savannah, to take office a year later. The next place of meeting was Macon.

Eightieth Annual Session
Macon, 1929

President C. K. Sharp called the meeting to order. The Calhoun Lecture was given by Dr. William S. Baer, Professor of Orthopedic Sur-

gery, Johns Hopkins University, who spoke on "Arthritis." Dr. Morris Fishbein, Editor of the Journal of the American Medical Association, delivered an address on "Fads and Quackery in Medicine." Dr. Leora G. Bowers, of Dayton, Ohio, read a paper entitled, "Certain Splenic Syndromes With Indications for Splenectomy."

Dry Clinics were held by Macon members as follows: "Gall Bladder Disease," by A. R. Rozar; "Mycosis Fungoides," by G. Y. Massenburg; "Pernicious Anemia," by T. E. Rogers; "Heart Disease," by William C. Pumpelly; "Scleroderma," by C. C. Harrold; "Postoperative Pulmonary Atelectasis," by C. H. Richardson, Jr.

Among papers read were: "Our Poisonous Serpents," by T. E. Oertel, Augusta; "The Challenge of Industry to Present-Day Medicine," by C. W. Roberts, Atlanta; "Spinal Anesthesia—Use of Spinocain in 100 Cases," by George W. Fuller, Atlanta; "Learning Therapeutics," by W. R. Houston, Augusta; "Nevi," by Jack W. Jones, Atlanta; "The Increasing Importance of Undulant Fever," by Evert A. Bancker, Jr., Atlanta; "Agranulocytosis," by J. D. Gray, Augusta; "The Epilepsies," by W. A. Smith, Atlanta; "Position of the Radiologist," by Robert Drane, Savannah; "Mesenteric Cysts with Intestinal Obstruction," by Ralph H. Chaney, Augusta; "A New Mode of Artificial Insemination in the Guinea Pig," by G. Lombard Kelly, Augusta; and "Some Problems in Gynecology," by Marion T. Benson, Atlanta.

The following officers were elected: President-Elect, G. Y. Moore, Cuthbert; First and Second Vice Presidents, C. H. Richardson, Jr., Macon, and Grady N. Coker, Canton; Delegates to the A.M.A., Allen H. Bunce; Alternate, O. H. Weaver. The Association accepted the invitation of Augusta to meet in that city in 1930. The incoming presiding officer, Dr. W. R. Dancy, having been elected one year previously, announced his committee appointments at the conclusion of the session.

Eighty First Annual Session
Augusta, 1930

The session convened with President W. R. Dancy in the chair. The usual committee reports were made before the House of Delegates. As usual, interesting reports were made by Fraternal Delegates to surrounding states. Dr. Hal M. Davison spoke of his visit to the meeting of the North Carolina Medical Association; Dr. C. K. Sharp told of his visit to the meeting of the Medical Association of Alabama; Dr. F. K. Boland described his trip to Louisville to attend the meeting of the Kentucky State Medical Association. Often the Medical Association of Georgia had the pleasure of hearing from fraternal delegates from other states.

Dr. Frank H. Lahey delivered the Abner W. Calhoun lecture, the title being "Goiter." Dr. Kenneth M. Lynch, of Charleston, spoke on

"Education," and Dr. Charles B. Wright, Associate Professor of Medicine in the University of Minnesota School of Medicine, addressed the Association on "Our Responsibility to the State."

Among the papers read by members were: "Acute Poliomyelitis," by Harold I. Reynolds, Athens; "Acute Osteomyelitis," by Charles W. Crane, Augusta; "Vaso-Motor Rhinitis," by Arthur G. Fort, Atlanta; "Laws Governing the Healing Art in Georgia," by J. O. Elrod, Forsyth; "Chronic Cystic Mastitis," by Charles C. Harrold, Macon; "Diverticula of the Esophagus, Pulsion Type," by H. H. McGee, Savannah; "Carcinoma of the Ureter," by John B. Cross, Atlanta; "Tularemia," by S. E. Sanchez, Barwick; "The Value of the Electrograph to the General Clinician," by J. A. Fountain, Macon; and "Angina Pectoris," by Charles C. Hinton, Macon.

The following officers were elected: President-Elect, Arthur G. Fort, Atlanta; First and Second Vice Presidents, George A. Traylor, Augusta, and S. T. R. Revell, Louisville; Secretary-Treasurer, Allen H. Bunce, Atlanta; Delegates to the A.M.A., William H. Myers and E. C. Thrash; Alternates, W. A. Mulherin, C. W. Roberts and C. K. Sharp. Atlanta was chosen to entertain the next meeting.

Eighty Second Annual Session Atlanta, 1931

This session, described by the Secretary as the best in the history of the Association, was called to order by the President, Dr. G. Y. Moore, with more than 650 members in attendance. Dr. William Gerry Morgan, President of the American Medical Association, gave an address on "The Control of Medicinal Alcohol as it Affects the Practitioner and the Public." Dr. James B. Herrick, Professor of Medicine in Rush Medical College, delivered the A. W. Calhoun Lecture, "Common Errors in the Treatment of Heart Disease." Dr. Charles M. Rosser, Professor of Clinical Surgery at Baylor University College of Medicine, Dallas, Texas, spoke on "The Menace of the Medical Underworld."

Following were papers read by members of the Association: "Etiology of Mental Diseases," George L. Echols, Milledgeville; "Legalized Surgical Prevention of Reproduction in the Unfit," E. C. Thrash, Atlanta; "A Discussion of Hypertension," Steve P. Kenyon, Dawson; "The Clinical Value of the Schilling Blood Count," Roy R. Kracke, Atlanta; "Treatment of Pneumonia," C. W. Strickler, Atlanta; "Encephalitis," Lewis M. Gaines, Atlanta; "Hallux Valgus," Michael Hoke, Atlanta; "Treatment of Acute Empyema by the Closed Method," D. Henry Poer, Atlanta; and "Organized or Group Medicine," by Montague L. Boyd, Atlanta.

For the first time the meetings of the Association were divided into two groups, Medical and Surgical. Vice President S. T. R. Revell, pre-

sided over the first section, and Vice President George A. Traylor presided over the surgical section. The Crawford W. Long Memorial Prize was presented to H. M. Tolleson, of Hahira.

Marvin H. Head, of Zebulon, was chosen President-Elect; Marion C. Pruitt, Atlanta, and H. M. Tolleson, Hahira, First and Second Vice Presidents; M. A. Clark, Parliamentarian; O. H. Weaver, Delegate, and C. K. Sharp, Alternate to the American Medical Association. A balance of \$5,448.30 was reported in the treasury. Savannah was chosen for the next place of meeting.

Eighty Third Annual Session Savannah, 1932

The meeting was called to order by President Arthur G. Fort, followed by the usual very cordial addresses of welcome, and responses. The scientific program opened with a paper by Wallace L. Bazemore, of Macon, on "Tuberculosis of the Kidney," followed by a paper on "Abnormal Ureters," by Spencer Kirkland, of Atlanta, and "Perinephritic Abscess," by E. B. Anderson, of Americus. Addresses by visiting guest speakers included the A. W. Calhoun oration on "The Clinical Manifestations of Malignant Disease," by Dean Lewis, Professor of Surgery, Johns Hopkins School of Medicine; "Practical Points in the Care of Patients with Indigestion," by Walter C. Alvarez, of the Mayo Clinic; and "The Relation of Diseases of the Nasal Accessory Sinuses to Systemic Derangements," by William Mithoefer, of Cincinnati.

Among other papers read were: "Biopsy," by Everett L. Bishop, Atlanta; "Symptoms and Diagnosis of Sinus Diseases," by Francis Blackmar, Columbus; "Treatment of Sinus Diseases," by Calhoun McDougall, Atlanta; "Vitamin Therapy," by D. H. Garrison, Tate; "Coronary Thrombosis and Angina Pectoris," by J. Reid Broderick, Savannah; "Observations of Some Common Breast Lesions," by William Perrin Nicolson, Atlanta; "Jaundice: The Effects on the Liver of Experimental Ligation of the Common Duct and Partial Hepatectomy," by J. Gaston Gay, Atlanta; "An Efficient Method of Traction for Fractures of the Femur," by C. H. Watt, Thomasville; and "Common Cold," by A. J. Waring, Savannah.

The following officers were chosen: Charles H. Richardson, Macon, President-Elect; A. A. Morrison, Savannah, and D. H. Garrison, Tate, First and Second Vice Presidents; J. W. Simmons, Brunswick, Parliamentarian; W. H. Myers, C. W. Roberts, Delegates to the A.M.A.; W. A. Mulherin and M. C. Pruitt, Alternates. Macon was selected as the meeting place for 1933.

Eighty Fourth Annual Session Macon, 1933

The Association convened with President Marvin M. Head in the chair. Among papers read were "Congestive Heart Failure," by S. T. R.

Revell, Louisville; "The Present Status of Iodine Therapy in Hyperthyroidism," by Henry Poer, Atlanta; "Fibroid Tumors of the Mesentery," by Olin H. Weaver; "Neurological Hazards of Spinal Anesthesia," by William A. Smith, Atlanta; "Diagnosis and Treatment of Aneurysms," by J. L. Campbell, Atlanta; and "Bismuth Poisoning in the Treatment of Syphilis," by John W. Brittingham, Augusta. Dr. Merrill C. Sosman, of Boston, delivered the Calhoun Lecture, the title being "Through the Alimentary Canal with the Fluoroscope."

Dr. Oliver C. Wenger, United States Public Health Service, of Hot Springs, Arkansas, read a paper on "The Diagnosis and Treatment of Syphilis." The Crawford W. Long Prize was awarded to Dr. Lombard Kelly, of Augusta. Dr. Hines Roberts had won the honor the previous year. Hon. T. W. Oliver, of the Georgia Pharmaceutical Association, spoke to the meeting. An interesting symposium was given on "Hypertension," those taking part being Abner W. Calhoun, Atlanta; Edgar R. Pund, Augusta; W. W. Chrisman, Macon; V. P. Sydenstricker, Augusta; and T. J. Charlton, Savannah. Dr. Roy R. Kracke, Atlanta, was awarded the Governor L. G. Hardman Loving Cup for one year.

Among other papers presented were: "Chronic Recurrent Migratory Colitis," by Hartwell Joiner, Gainesville; "Fistula-in-Ano," by George F. Eubanks, Atlanta; "Management of the Third Stage of Labor," by C. B. Upshaw, Atlanta; "Pylorospasm, or Congenital Hypertrophic Stenosis of the Pylorus," by J. C. Brim, Pelham; "Cancer of the Larynx," by Edward S. Wright, Atlanta; "The Aspiration and Air Injection Method of Treating Empyema," by Thomas Harold, Macon; "Appendicitis Complicated by Adhesions and Bands," by Luther C. Fischer, Atlanta; "Transurethral Resection of the Prostate Gland, with Report of 125 Cases," by E. G. Ballenger, Atlanta; "Correlation of X-ray Findings with Clinical Symptoms in Brain Lesions," by W. F. Lake, Atlanta; and "Thrombo-Angiitis Obliterans," by Robert L. Kennedy, Metter.

Officers elected were: C. L. Ayers, Toccoa, President-Elect; J. D. Applewhite, Macon, and W. W. Turner, Nashville, First and Second Vice Presidents; O. H. Weaver, Delegate to the A.M.A.; Alternate, C. K. Sharp. Augusta was chosen for the next meeting place.

Eighty Fifth Annual Session Augusta, 1934

The August number of THE JOURNAL OF THE MEDICAL ASSOCIATION OF GEORGIA contains very full records of meetings of the House of Delegates at this session in Augusta. Dr. Charles H. Richardson presided. Reports were heard from all the officers. The Treasurer showed receipts of \$19,171.54 for the fiscal year, with disbursements of \$12,207.65, leaving a balance of \$9,963.89. Several minor changes were made in the By-Laws,

and the full Constitution and By-Laws were published in the April number of the JOURNAL, page 145.

The program of the meeting also was published in this number, but the minutes of the meeting were lacking. Dr. Waltman Walters, of the Mayo Clinic, delivered an address on "The Present Status of Gastric Surgery;" Dr. Louis Hamman, of Baltimore, gave "A Discussion of the Diagnosis of Obscure Fever," and Dr. Emil Novak, of Baltimore, presented the A. W. Calhoun Lecture on "Endocrine Aspects of Gynecology."

Among papers read were: "Medical Economics as Related to Patients of the Low Income Group," by Lewis M. Gaines, Atlanta; "The Irritable Colon," by J. D. Gray, Augusta; "Scarlet Fever and Its Complications," by C. P. Savage, Montezuma; "Allergy," by M. A. Ehrlich, Bainbridge; "Posterior Vaginal Hernia," by J. Harris Dew, Atlanta; "A Fatal Reaction Following Artificial Pneumothorax," by Joseph C. Massee, Atlanta; "Cancer of the Bladder," by Montague L. Boyd, Atlanta; "Uterine Hemorrhage," by L. C. Allen, Hoschton; "Non-Union of Fractures," by Peter B. Wright, Augusta; and "Hypothyroidism with Special Reference to Types," by Ernest F. Wahl, Thomasville.

An important symposium on Typhus Fever consisted of a paper on "Endemic Typhus Fever in Georgia," by Mark S. Dougherty, Jr., Atlanta, discussed by J. E. Paullin, Lawrence Lee, W. A. Selman, T. F. Sellers, D. L. Seckinger, R. W. Fowler and Herbert S. Alden; and a paper on "Recent Developments in the Knowledge of Endemic Typhus Fever," by T. F. Sellers, Chief of Laboratories, State Department of Health. A symposium on Gallbladder Disease was presented by Charles H. Watt, Thomasville, who read a paper on "Cholecystitis, An Analysis of One Hundred Cases," and by Lon Grove and Joseph C. Read, Atlanta, whose paper was entitled "Indications for Surgery in Gallbladder Disease." These articles were discussed by Kenneth R. Bell, Kenneth McCullough, W. S. Goldsmith, Frank K. Boland, A. D. Little, and Waltman Walters of the Mayo Clinic.

Officers elected were: President-Elect, James E. Paullin, Atlanta; First and Second Vice Presidents, George A. Traylor, Augusta, and W. G. Elliott, Cuthbert; Delegates to the A.M.A., W. H. Myers and C. W. Roberts; Alternates, W. A. Mulherin and M. C. Pruitt. It was decided to hold the next meeting in Atlanta.

Eighty Sixth Annual Session Atlanta, 1935

This meeting, with President C. L. Ayers in the chair, was the largest attended in the history of the Association to this time, more than 750 members being present. THE JOURNAL for May, 1935, contained "Notes on the History of the Medical Association of Georgia, 1920-1935," written by Allen H. Bunce, Secretary-Treasurer

for this period, who retired from this position after the meeting. Dr. Bunce's article was very complete and included a discussion of many subjects of importance, such as the Association and the Legislature, Education and Medical Schools, Hospitals and Training Schools for Nurses, the Cancer Commission, Medical Defense, and others.

The title of the President's address was "Medicine as a Career." A very important paper read before the House of Delegates was a Report of the Committee for the Study of Maternal Mortality during the year 1933. Other papers read were: "The Responsibility of the General Practitioner in Diseases of the Eye," by Zach W. Jackson, Atlanta; "The Treatment of Varicose Veins and Ulcers," by C. E. Rushin, Atlanta; "The Trend of Medical Education," by Russell H. Oppenheimer, Atlanta; "Multiple Myeloma," by W. R. Minnich, Atlanta; "Treatment of Clinical Acidosis," by Philip A. Mulherin, Augusta; and "The Surgical Treatment of Thyroid Diseases," by D. Henry Poer, Atlanta.

The following officers were chosen, and Savannah selected for the next meeting: President-Elect, B. H. Minchew, Waycross; First and Second Vice Presidents, James J. Clark, Atlanta, and Philip R. Stewart, Monroe; Secretary-Treasurer, Edgar D. Shanks, Atlanta; Parliamentarian, John W. Simmons, Brunswick; Delegates to the A.M.A., W. H. Myers, C. W. Roberts, and O. H. Weaver; Alternates, W. A. Mulherin, M. C. Pruitt, and C. K. Sharp.

The program included an address on "Newer Concepts of Immunity and Allergy—Their Importance in Modern Medicine," by Reuben L. Kahn, Director of Laboratories of the University of Michigan, Ann Arbor, Michigan; the A. W. Calhoun Lecture on "The Treatment by the General Practitioner of the More Common Diseases of the Nervous System," by Lewellys F. Barker, Professor Emeritus of Medicine, Johns Hopkins University School of Medicine; and a movie presentation on the American Medical Association, by Austin A. Hayden, Head of the Department of Otolaryngology and Ophthalmology of St. Joseph's Hospital, Chicago.

Eighty Seventh Annual Session Savannah, 1936

The Presidential address by Dr. James E. Paullin was entitled "Learning Better How to Live." Among the papers on the program were: the Abner W. Calhoun Lecture entitled "Fundamental Aspects of the Diagnosis and Treatment of Anemia," by William Bosworth Castle, Associate Professor of Medicine, Harvard University School of Medicine; "The Problem of the Diaphragm," by Arthur M. Shipley, Professor of Surgery, University of Maryland School of Medicine; "Management of the Chronic Heart," by Jonathan C. Mcakins, Professor of Medicine, McGill University, and President of the Canadian

Medical Association; and "The Influence of the Present-Day Depression Upon the Nutritive State of the American People," by James S. McLester, Professor of Medicine, University of Alabama School of Medicine, and President of the American Medical Association.

Among papers published on the Official Program were: "The Dilution and Concentration Tests of Kidney Function," by W. Edward Storey, Columbus; "Some Comments Upon the Present-Day Practice of Rhinology Based Upon Forty-Two Years Experience," by Dunbar Roy, Atlanta; "Primary Bronchial Carcinoma," by J. D. Gray, Augusta; "Utero-Intestinal Anastomosis," by George W. Wright, Augusta; "Friedman's Modification of the Aschheim-Zondek Pregnancy Test," by George F. Klugh, Atlanta; "Further Observation on Sleep," by Glenville Giddings, Atlanta; "The Use of Atabrine in the Control and Treatment of Malaria," by M. E. Winchester, Brunswick; "Hemorrhages of the Brain," by J. Calvin Weaver, Atlanta; "The Treatment of Myasthenia Gravis," by William A. Smith, Atlanta; and "History of Hysterectomy, with a Review of Hysterectomies Performed in the John D. Archbold Memorial Hospital," by Arthur D. Little, Thomasville.

Officers elected for the ensuing year were: President-Elect, George A. Traylor, Augusta; First and Second Vice Presidents, C. F. Holton, Savannah, and J. B. Kay, Byron; Delegates to the A.M.A., W. H. Myers, C. W. Roberts and O. H. Weaver; Alternates, W. A. Mulherin, M. C. Pruitt and C. K. Sharp. The next meeting was to go to Macon.

Eighty Eighth Annual Session Macon, 1937

The title of the presidential address of Dr. B. H. Minchew was "The Responsibility of the Layman in a Public Health Program." Dr. Charles F. Craig, Professor of Tropical Medicine, Tulane, spoke on "Tropical Diseases of Interest to the Southern Physicians;" Dr. J. H. J. Upham, President-Elect of the American Medical Association, and Dean and Professor of Medicine, Ohio State University College of Medicine, Columbus, Ohio, spoke on "Heart Disease in Middle Life;" and the Calhoun Lecture on "The Story of the Vitamins in Infant Nutrition" was delivered by Isaac A. Abt, Professor of Pediatrics, Northwestern University Medical School, Chicago. Dr. Olin West, Secretary of the American Medical Association, gave a short address, and Dr. Roy McClure, of the Henry Ford Hospital, Detroit, discussed "The Control of Thyroid Disease in Michigan."

The meeting was well attended, and an interesting program presented throughout. Among papers read by the members were: "Acute Infectious Diseases of the Nervous System," by Richard B. Wilson, Atlanta; "Acute Hemorrhagic Nephritis in Children with Special Emphasis on Treatment," by Joseph Yampolsky, At-

lanta; "Treatment and Prophylaxis of Malaria," by Roy A. Hill, Thomasville; "Protamine Insulin in the Treatment of Diabetes Mellitus," by J. E. Paullin and W. R. Minnich, Atlanta; and "The Treatment of Hernia by Injection," by Enoch Callaway, LaGrange. An instructive symposium on Fractures was presented by Grady Coker, H. H. McGee, Cleveland Thompson, R. L. Rhodes, Michael Hoke, Calvin Sandison, Lawson Thornton and Harry L. Cheves. An interesting symposium on Tuberculosis was given by D. T. Rankin, F. C. Whelchel, H. E. Crow, Daniel Elkin, C. W. Strickler, Jr., C. D. Whelchel and A. Worth Hobby.

THE JOURNAL always contained many good papers which were not read during the meetings of the Association. The minutes of the House of Delegates were not published, but one resolution announced the annual dues as \$7.00 per capita. The Treasurer's report showed receipts \$16,977.71, disbursements \$13,800.53, leaving a balance on hand of \$13,518.32. The Woman's Auxiliary, as usual, presented a fine program.

The choice of officers resulted in the election of Grady N. Coker, Canton, President-Elect; Hall Farmer, Macon, and Hulett Askew, Atlanta. First and Second Vice Presidents; Olin Weaver, Macon, re-elected delegate to the A.M.A. The next annual session was to go to Augusta.

Eighty Ninth Annual Session Augusta, 1938

George A. Traylor presided. The name of V. P. Sydenstricker was added to the Hardman Loving Cup, the preceding names being Roy R. Kracke, J. A. Redfearn, Glenville Giddings and J. L. Campbell. The June number of THE JOURNAL contained an abstract of the Proceedings of the House of Delegates.

Among essays on the Program were: "Relief of Causalgic-Like Pain in the Isolated Extremity by Sympathectomy," by R. Frank Slaughter, Augusta; "Surgery of Peptic Ulcer," by John W. Turner, Atlanta; "Acute Diverticulitis of the Colon," by Lon W. Grove, Atlanta; "Infectious Mononucleosis," by Allen H. Bunce, Atlanta; "Some Practical Points of Meeting Poor Surgical and Anesthetic Risks in Surgical Diseases," by T. J. Collier, Atlanta; "Traumatic Rupture of the Normal Spleen," by W. W. Battey, Augusta; and "The Ambulant Proctologic Patient," by J. H. McDuffie, Jr., Columbus.

The Abner W. Calhoun Lecture was delivered by Dr. George H. Semken, of New York City, his subject being "The Problem of the Lump in the Breast." Dr. Irvin Abell, of Louisville, President-Elect of the American Medical Association, gave an address, as did Hon. Walter F. George, United States Senator from Georgia.

Officers elected were: W. H. Myers, Savannah, President-Elect; P. B. Wright, Augusta, and W. B. Schaefer, Toccoa, First and Second Vice Presidents; W. H. Myers, C. W. Roberts, and

O. H. Weaver, Delegates to the A.M.A.; Alternates, W. A. Mulherin, M. C. Pruitt and C. K. Sharp. Atlanta was chosen for the next place of meeting.

Ninetieth Annual Session Atlanta, 1939

With President Grady Coker in the chair, the meeting opened again with the largest attendance on record, more than 700 members being present. The President's address was entitled "Modern Trends of Medical Practice." Hon. Robert F. Maddox, of Atlanta, Chairman of the State Board of Health, spoke on "The Social and Economic Value of Health." "Some Phases of Medical Economics" was discussed by Dr. H. H. Shoulders, Assistant Professor of Clinical Surgery, Vanderbilt University, while Dr. Lawrence S. Fallis, of the Henry Ford Hospital, Detroit, contributed a paper on the "Operative Treatment of Inguinal Hernia" to a Symposium on Industrial Surgery.

On the program was a paper on "Prophylactics and the Common Cold," by Hartwell Joiner, Gainesville; "The Importance of the Differential Diagnosis of Heart Disease," by L. Minor Blackford, Atlanta; "Carotid-jugular Arteriovenous Aneurysm," by J. K. Quattlebaum, Savannah; "Treatment of Sterility," by C. B. Upshaw, Atlanta; "Psychiatric Problems in a General Hospital," by Hervey Cleckley, Augusta; "Principles Involved in the Treatment of Congenital Club-foot," by J. H. Kite, Decatur; and "Autogenous Vaccines as an Aid in Treating Certain Diseases," by Jack Norris, Atlanta. A Cancer symposium was put on by J. L. Campbell, C. C. Harrold, Howard Hailey, Enoch Callaway, A. D. Little, J. J. Collins, Edgar Pund, E. S. Cardwell and J. E. Scarborough.

New officers elected were: J. C. Patterson, Cuthbert, President-Elect; Mark S. Dougherty, Jr., Atlanta, and A. A. Rogers, Commerce, First and Second Vice Presidents. The next meeting was to go to Savannah.

Ninety First Annual Session Savannah, 1940

William H. Myers presided. In a synopsis of the Proceedings of the House of Delegates appears this sentence, which illustrates the condition of the Association: "To our Secretary-Treasurer and other responsible leaders we would record our acknowledgment of the real part which they are playing in carrying forward a program of medical service to our people second to none in the country."

Among the papers on the program were: "Pancreatitis," by Guy J. Dillard, Columbus; "Sulfanilamide and Its Derivatives," by Eustace A. Allen, Atlanta; "Pentothal Sodium—Oxygen Anesthesia from the Viewpoint of the General Surgeon," by T. C. Davison and Fred Rudder, Atlanta; "Treatment of Pneumonia in Adults with Sulfapyridine," by J. Fletcher Hanson, Macon; "Surgical Cure of Hyperparathyroidism—Report

of Case," by Bruce Threatte, W. F. Jenkins and Ragsdale Hewitt, Columbus; "Bronchography in Chest Diseases," by Sherwood H. Lynn, Savannah; and "Biliary Obstruction Complicating Hemorrhagic Diseases of the Newborn," by J. T. Leslie and Kenneth S. Hunt, Griffin. The Hardman Cup was awarded to Drs. Howard and Hugh Hailey, of Atlanta.

There was a symposium on the Problems of Medical Care in Georgia, and another symposium on Obstetrics. The Abner Wellborn Calhoun Lecture was presented by Rollin T. Woodyatt, Clinical Professor of Medicine, University of Chicago, on "Newer Phases of the Diabetic Problem." Dr. Frank H. Lahey gave an address on "Thyroid Disease"; Kenneth M. Lynch, Professor of Pathology, Medical College of the State of South Carolina, Charleston, spoke on "Progress in Knowledge and Control of Cancer;" while the subject of the paper of Dr. Lloyd Noland, Chief Surgeon, Tennessee Coal and Iron Corporation, Birmingham, was "The Function of the Industrial Physician."

Officers chosen were: President-Elect, Allen H. Bunce, Atlanta; First and Second Vice Presidents, J. K. Quattlebaum, Savannah, and Marion T. Benson, Jr., Atlanta; other officers remaining as before. The session of 1941 was awarded to Macon.

Ninety Second Annual Session Macon, 1941

Not including special essays and the addresses of visiting guests, twenty-eight papers by members of the Association appeared on the official program. In spite of four-day sessions as compared with the three-day sessions of former years, the number of papers on the program were fewer in number. The extra time consumed was largely due to an increased number of discussions of the papers. At this meeting, presided over by J. C. Patterson, the Calhoun Lecture was given by Dr. John Alexander, Professor of Surgery, University of Michigan, on "The Management of Intrathoracic Tumors." Dr. Russell L. Cecil, Professor of Clinical Medicine, Cornell University, New York City, spoke on "The Plight of the Arthritic;" Dr. Daniel C. Elkin, Professor of Surgery, Emory University, discussed "The Special Field of Cardiac Surgery," while "Multiple Factors in Deficiency Disease" was the subject of the address by Virgil P. Sydenstricker, Augusta, Professor of Medicine, University of Georgia School of Medicine.

On the program were papers by Thomas Harold, Jr., Macon, on "Further Observations on the Treatment of Cancer of the Breast;" J. G. McDaniel, Atlanta, on "Air Embolism as a Cause of Death;" James E. Bayliss, Colonel, Medical Corps, U. S. Army, on "Medical Preparedness;" Edgar H. Greene, Atlanta, on "The Types of Sterility in the Female that are Amenable to Treatment;" C. M. Sharp, Alto, and

Linton Smith, Atlanta, on "Pneumothorax;" Louis L. Williams, Jr., Senior Surgeon, U. S. Public Health Service, on "Public Health and the Defense Program;" and "The So-Called Psychopathic Personality," by Hervey Cleckley, Augusta.

Scientific Exhibits had grown to be of great importance, there being thirty-one at this meeting. The Commercial Exhibits numbered twenty-nine. New officers elected were: J. A. Redfearn, Albany, President-Elect; H. G. Weaver, Macon, and Lester Harbin, Rome, First and Second Vice Presidents. Augusta was selected for the next meeting.

Ninety Third Annual Session Augusta, 1942

With Allen H. Bunce presiding, the Scientific Program opened with a symposium on Public Health Problems, in which T. F. Abercrombie, Guy G. Lunsford, E. S. Sanderson, Justin Andrews, L. M. Petrie, J. D. Applewhite and G. T. Bernard took part. The United States had declared war against Japan December 8, 1941, the day after the treachery at Pearl Harbor, and the hours published on the program were marked "War Time," which meant one hour before normal time.

The Calhoun Lecture was given by Dr. Perrin H. Long, of Baltimore, Professor of Preventive Medicine, Johns Hopkins University School of Medicine, and an address presented on "Medical Problems: National, Economic and Scientific," by Dr. Frank H. Lahey, President of the American Medical Association. The Presidential address by Dr. Bunce was entitled "Medical Problems of 1942."

Four other symposiums were on the program, the first being one on Psychoses and Psychoneuroses, by Hervey Cleckley, J. C. Metts, H. D. Allen, Jr., Ernest F. Wahl, James N. Brawner, Sr. and Jr., and E. H. Parsons, Major, Medical Corps, U. S. Army. The following participated in the symposium on "Eye, Ear, Nose and Throat Problems:" S. J. Lewis, Alton V. Hallum, W. O. Martin, Jr., Lester Brown and Murdock Euen. William F. Lake, R. C. Pendergrass, J. J. Clark, A. A. Rayle and J. W. Landham gave a symposium on "The Roentgenological Problems of the Gastro-Intestinal Tract;" while a symposium on "Surgical Problems" was conducted by M. C. Pruitt, Henry Pocr, H. A. Seaman, T. C. Davison, Richard Torpin, A. Miller, Shelley Davis and F. B. Brown.

At this session of the Association Secretary-Treasurer, Edgar D. Shanks, offered the following resolution, which received enthusiastic support of the Council, the House of Delegates and the members of the Association in general session:

Whereas, The activities of the Medical Association of Georgia have grown each year; and

Whereas, There should be established a permanent headquarters office for the routine business of the Association, for the preservation of the archives of the Association, including medical history; and for a medical

package library service for the benefit of both the medical profession and the public; and

Whereas, The finances of this Association are now favorable to the development of such a plan; and

Whereas, This year—1942—marks the hundredth anniversary of Dr. Crawford W. Long's discovery of the anesthetic properties of ether; and

Whereas, It would be appropriate for this Association to honor the memory of its most distinguished deceased member—Crawford Williamson Long—by naming the proposed building the Crawford W. Long Memorial Building; therefore

Be It Resolved, By the Council of this Association, and the same is recommended and transmitted to the House of Delegates and the Association in general session, at Augusta, this May 1, 1942, that the Medical Association of Georgia develop, through its Council, plans for a permanent headquarters building for the Association, and that the sum of Five Thousand (\$5,000) Dollars be set aside by the Association's Secretary-Treasurer to be known as the Building Fund, the fund to be added to from year-to-year as the Association directs until a sufficient amount is available to facilitate a suitable building program.

New officers chosen for 1942-43 were; W. A. Selman, Atlanta, President-Elect; S. J. Lewis, Augusta, and Cleveland Thompson, Millen, First and Second Vice Presidents; Allen H. Bunce, Delegate to the A.M.A., H. C. Sauls, Alternate. Atlanta was selected as the next meeting place.

Ninety Fourth Annual Session

Atlanta, 1943

With J. A. Redfearn presiding, the House of Delegates held three important meetings. Dr. Edgar D. Shanks, Secretary-Treasurer, reported that more than 500 members of the Association were in military service. His report also revealed a balance in the treasury of \$40,773.31. The Committee on Medical Preparedness showed that efforts were being made to secure physicians for the armed forces, under what was known as the Procurement and Assignment Service.

The scientific program contained papers by R. Bruce Logue, Major, Medical Corps, on "The Electrocardiogram: Its Indications and Limitations;" "Critique on the Use of the Erythrocyte Sedimentation Test in Clinical Medicine," by Lieut. Charles Purcell Roberts: "Atypical Pneumonia," by Lieut. Comd. Mark S. Dougherty, Jr.; "Traumatic Shock," by Everett I. Evans, Richmond, Va.; and "Medical Conservation of Manpower in a Shipyard," by R. L. Brown, Brunswick. The Hardman Loving Cup was awarded to Dr. J. E. Paullin, of Atlanta, for 1943.

Invited guests rendered the following: "Medical Achievements in This Present War," the Calhoun Lecture, by Rear Admiral Ross T. McIntyre, Surgeon General of the Navy; "Complications of Acute Coronary Thrombosis," by Chauncey C. Maher, Associate Professor of Medicine, Northwestern University Medical School; and "Practical Points in the Diagnosis and Treatment of Graves' Disease," by James H. Means, Professor of Medicine, Harvard Medical School.

The following new officers were elected: President-Elect, Cleveland Thompson, Millen:

First and Second Vice Presidents, Major Fowler, Atlanta, and C. Hall Farmer, Macon. Savannah was chosen for the next meeting.

Ninety Fifth Annual Session

Savannah, 1944

On the program of this meeting, presided over by W. A. Selman, were papers by John Persall and Richard Torpin, Augusta, on "Placenta Previa: Report of 170 Cases;" Elton S. Osborne, Savannah, on "Psychoanalysis;" "The Management of the Obese Diabetic," by L. Harvey Hamff, Atlanta; "Hyperglycemia Following Protamine-Zinc Insulin Therapy," by George L. Walker, Griffin; "Low Back and Sciatic Pain: Neurologic Point of View," by Edgar F. Fincher, Atlanta; "Low Back Pain and Disability: Orthopedic Point of View," by Fred G. Hodgson, Atlanta; and "Shock," by Arthur J. Merrill, Atlanta.

The Abner Calhoun Lecture was given by Arthur W. Allen, of Boston, on "Gastric and Duodenal Ulcers." Among other papers were: "Granuloma Inguinale," by Gordon G. Allison, Atlanta; "The Diagnosis of Hydronephrosis," by Donald E. Beard, Atlanta; "Renal Ectopia," by Rudolph Bell, Thomasville; "Skin Cancer: Its Management," by W. L. Dobes, Atlanta; "Multiple and Solitary Renal Cysts," by Samuel J. Sinkoe, Atlanta; "Cardiovascular-renal Problems," by L. L. Whitley, Athens; and "Penicillin in Acute and Chronic Infections," by Albert L. Evans, Atlanta. This was the first paper on penicillin read before the Association.

Officers elected were: Ralph H. Chaney, Augusta, President-Elect; Ruskin King, Savannah, and J. B. Kay, Byron, First and Second Vice Presidents. Macon was chosen for the next meeting.

Ninety Sixth Annual Session

Macon, 1946

The Office of Defense Transportation, Washington, D. C., denied the Association's request to hold the annual session in 1945, therefore all officers and committees were continued until another annual session could be held. The officers and chairmen of the principal committees at this time were:

President—Cleveland Thompson, Millen
President-Elect—Ralph H. Chaney, Augusta
First Vice President—Ruskin King, Savannah
Second Vice President—J. B. Kay, Byron
Parliamentarian—J. W. Simmons, Brunswick
Secretary-Treasurer—Edgar D. Shanks, Atlanta.

Delegates to the A.M.A.

<i>Delegates</i>	<i>Alternates</i>
W. A. Mulherin, Augusta	B. H. Minchew, Waycross
Allen H. Bunce, Atlanta	H. C. Sauls, Atlanta
Olin H. Weaver, Macon	C. K. Sharp, Arlington

Council

Steve P. Kenyon, Chairman Marion C. Pruitt, Clerk

Committees

Scientific Work—B. H. Minchew, Chairman
Public Policy and Legislation—Spencer A. Kirkland, Chairman
Medical Defense—Marion C. Pruitt, Chairman
Abner W. Calhoun Lectureship—James E. Paullin, Chairman
Medical Economics—B. T. Beasley, Chairman

Memorial Exercises—A. J. Mooney, Chairman
 Medical History of Georgia—F. K. Boland, Chairman
 Cancer Commission—J. L. Campbell, Chairman
 Tuberculosis—C. C. Aven, Chairman
 Clinical Pathology—A. J. Ayers, Chairman
 Scientific Exhibit—W. F. Hamilton, Chairman
 Awards—W. R. Dancy, Chairman
 Maternal Mortality and Infant Deaths—H. F. Sharpley, Jr., Chairman.

The title of President Cleveland Thompson's address was "The Doctor in This New Day." The A. W. Calhoun Lecture was given by Dr. Winchell M. Craig, of the Mayo Clinic, the subject being "The Early Diagnosis of Neurosurgical Conditions." Addresses by other visiting guests were: "Correcting Some of Nature's Mistakes by Surgical Intervention," by Oswald S. Lowsley, New York City; "Our Battle for Freedom," by H. H. Shoulders, Nashville, Tenn., President-Elect, American Medical Association; and "Psychosomatic Gynecology," by J. P. Pratt, Detroit.

Among papers on the program were: "The Etiology of Convulsions," by Homer S. Swanson, Atlanta; "The Treatment of Epilepsy in Children with Sodium Dilantin," by Benjamin Bashinski, Macon; "Congenital Heart Disease," by Laura Lipscomb, Atlanta; "The Surgical Management of the Obstructive Prostate," by Glenn J. Bridges, Atlanta; "Anti-Rh Factors in Blood Typing," by A. J. Ayers, Atlanta; "Reactions Due to Topical Application of Sulfoanilides," by W. L. Dobes, Atlanta; "Surgery in Elderly Patients," by W. W. Baxley, Macon; "The Use of Thiouracil in the Treatment of Toxic Goiter, and Its Dangers," by T. C. Davison, Atlanta; "Newer Concepts of the Growth of the Placenta," by Joseph Krafka, Jr., Augusta; and "Spirotrichosis: Report of Case," by D. H. Garrison, Clarksville.

New officers chosen were: Steve P. Kenyon, Dawson, President-Elect; A. M. Phillips, Macon, and C. Purcell Roberts, Atlanta, First and Second Vice Presidents; Edgar D. Shanks, Sr., Atlanta, Secretary-Treasurer; B. H. Minchew, Delegate to the A.M.A.; W. R. Dancy, Alternate. One hundred and thirty-two members were reported as deceased in the two-year period from 1944 to 1946. The Association accepted the invitation of Augusta to meet in that city in 1947.

Ninety Seventh Annual Session Augusta, 1947

With R. H. Chaney presiding, the Association met at the Bon Air Hotel. The Council and House of Delegates held interesting and important meetings, well reported by the official stenographer. Following the close of the war, many newcomers had moved in and were making good active members. The title of the President's address was "Medicine: It's Problems and Its Solutions."

Among papers published on the program were: "Vagotomy," by John W. Turner, Atlanta; "Carcinoma of the Colon," by J. D. Martin, Jr., Atlanta; "Surgery of the Colon and Rectum," by Edgar Boling, Atlanta; "Silicosis," by Thomas

J. Hicks, McCaysville; "Chronic Alcoholism," by John D. Campbell, Atlanta; "Diverticulitis of the Sigmoid with Obstruction," by H. H. McGee, Savannah; "Influence of Morphine on the Uterus of Humans," by R. A. Woodbury, Augusta; "Differential Diagnosis of Anterior Chest Pain," by Bruce Logue, Atlanta; "The Treatment of Early Syphilis with Penicillin in Peanut Oil and Beeswax," by Albert Heyman, Atlanta; "Pigmented Lesions of the Eye and Adnexae," by Phinzy Calhoun, Jr., Atlanta; and "Metastatic Cancer of the Lung," by R. C. Pendergrass, Americus.

"The Later Years" was the subject of the Calhoun Lecture presented by Dr. Edward L. Bortz, of Philadelphia. "How Is Poliomyelitis to Be Controlled?" was discussed by Dr. Howard A. Howe, of Baltimore; and the address of Dr. Max M. Peet, of Ann Arbor, Michigan, was entitled "Bilateral Supradiaphragmatic Splanchnicectomy in the Treatment of Arterial Hypertension."

The following new officers were elected, and Atlanta chosen for the next meeting: President-Elect, Edgar H. Greene, Atlanta; First and Second Vice Presidents, J. Victor Roule, Augusta, and Thomas J. Ferrell, Waycross. The delegates and Alternate Delegates to the A.M.A. were re-elected.

Ninety Eighth Annual Session Atlanta, 1948

The Association met at the Academy of Medicine, home of the Fulton County Medical Society, with Steve P. Kenyon presiding. The Secretary reported 741 doctors registered for the session, 239 members of the Woman's Auxiliary, and 102 exhibitors. The Committee on Exhibits awarded its first prize to Edgar R. Pund and H. E. Nieburgs, of the University of Georgia School of Medicine, for the "Value of Vaginal and Cervical Spreads for the Early Recognition of Carcinoma."

The President's address was entitled "Current Problems of Organized Medicine." The Calhoun Lecture was given by Dr. Henry K. Beecher, of Boston, Dorr Professor of Anesthesia, Harvard Medical School, his subject being "On the Relief of Suffering Within the Hospital." Other guest speakers were Dr. George R. Herrmann, of Galveston, Texas, who spoke on "Coronary Artery Heart Disease;" Dr. Robert B. Lawson, Winston-Salem, North Carolina, Associate Professor of Pediatrics, The Bowman-Gray School of Medicine, whose subject was "Recent Concepts Regarding the Spread and Treatment of Poliomyelitis;" and Dr. Thomas Findley, of New Orleans, Associate Professor of Clinical Medicine, Tulane University School of Medicine, who discussed "A New Concept concerning the Pathogenesis of Certain Disorders Associated with Aging."

Among the papers on the program were:

"Streptomycin in the Therapy of Granuloma Inguinale; Report of 100 Cases," by Calvin Chen, Robert B. Greenblatt and Robert B. Dienst, Augusta; "The Treatment of Influenzal Meningitis with Streptomycin and Sulfadiazine," by Joseph Yampolsky, Atlanta, and John Paul Jones, Macon; "Modern Clues to the Early Identification and Proper Treatment of Carcinoma of the Lung," by Osler A. Abbott and William A. Hopkins, Atlanta; "Facial Palsies," by W. A. Smith, Atlanta; "Head Enlargement in Infants," by Charles E. Downman, Atlanta; "The Fallacy of the Basal Metabolic Rate," by J. K. Fancher, Atlanta; and "The Cystoscopic Extraction of Ureteral Calculi," by Charles Eberhart and James L. Campbell, Jr., Atlanta.

Enoch Callaway, of LaGrange, was chosen President-Elect for the ensuing year; Eustace A. Allen, Atlanta, and F. M. Simonton, Chickamauga, First and Second Vice Presidents; the other officers remaining as before. The session adjourned to meet in Savannah the following year.

Ninety Ninth Annual Session Savannah, 1949

Thus the Medical Association of Georgia comes to its centennial meeting, having been organized in Macon one hundred years ago, in 1849. The Secretary called attention to the fact that the Association has the largest membership in its history, 2,202. He also stated that of this number, 1,045, slightly less than half the total, had responded to the assessment of the American Medical Association to prosecute the fight against socialized medicine. Dr. Shanks further said that fifty years ago the Association numbered 475 members, with cash assets of \$160.09; in 1949 the membership was 2,202, with assets of \$97,434.51. During this time dues had increased from \$3.00 per member to \$10.00, but until 1947 had been around \$7.00.

Dr. Edgar H. Greene presided during this historic meeting. The subject of his address was "Our Problems at the Beginning of the Association's Second Hundred Years." On the program was the Calhoun Lecture, "The Clinical Significance of Closure of the Retinal Blood Vessels," by Dr. W. L. Benedict, of the Mayo Clinic; a paper on "Diseases of the Cervix," by Dr. Conrad G. Collins, of New Orleans, Professor of Gynecology, Tulane University School of Medicine; "What the Medical Profession Is Doing About Your Eyes," by Dr. Ralph S. McLaughlin, Charleston, West Virginia; and "The Detection of Early Cancer by Means of Periodic Examination," by Dr. Catharine Macfarlane, of Philadelphia, Professor of Gynecology, Woman's Medical College of Pennsylvania.

Among other papers published on the program were: "Present Status of Chemotherapy of Leukemia," by Tully T. Blalock, Atlanta; "The Use of Rice Diet in Hypertension—Preliminary Re-

port of 25 Cases," by R. E. Felder, LaGrange; "Two Years' Experience in the Diagnosis of Uterine Cancer by Means of Vaginal Smears," by H. J. Frech, Savannah; "Total Laryngectomy," by Murdock Euen, Atlanta; "Diabetes Mellitus in Pregnancy," by John R. McCain, Atlanta; "Surgical Management of Exstrophy of the Bladder," by M. K. Bailey, Atlanta; "Diagnostic and Therapeutic Block for the Treatment of Pain," by C. MacKenzie Brown, Albany; "Roentgen Therapy for Bursitis of the Shoulder," by David Robinson, Savannah; and "Breech Presentation: Is Fetal Extension an Etiologic Factor?" by Richard Torpin and Guy C. Calk, Augusta.

The Hardman Loving Cup was awarded for 1949 to Dr. John L. Elliott, of Savannah, for his work in connection with prepayment medical care plans in Georgia. The Ware County Medical Society Cup, presented to the Association by this society many years ago, was awarded for the first time, this year to Dr. William R. Dancy, of Savannah, for meritorious work done in Army hospitals during World War I. The first prize for scientific exhibits was given to Robert B. Greenblatt, of Augusta, of the Department of Endocrinology, University of Georgia School of Medicine. His exhibit was on "Functional Uterine Bleeding."

Officers for 1950 were elected as follows: President-Elect, A. M. Phillips, Macon; First and Second Vice Presidents, Ralph O. Bowden, Savannah, and H. Walker Jernigan, Atlanta; Parliamentarian (3 years) J. W. Simmons, Brunswick; Delegate to the A.M.A., C. H. Richardson, Sr., Macon. C. K. Sharp, of Arlington, agreed to serve the remainder of 1949 as delegate to the A.M.A., to fill the vacancy created by the death of O. H. Weaver, of Macon. Edgar D. Shanks, Sr., Atlanta, was continued as Secretary-Treasurer. Macon was selected for the next meeting.

The March, 1946, number of the JOURNAL OF THE MEDICAL ASSOCIATION OF GEORGIA contained an interesting article written by John W. Simmons, of Brunswick, entitled "Forty Years of Medicine," in which the main inventions and discoveries in medicine of that time are described. Most of these contributions were mentioned in this history in the year 1921. Since that time several epoch-making additions have been made, and many of them have received attention in the papers and discussions of the Association. Among these may be mentioned:

1922—The introduction of lipiodol, by Sicard.

1925—Graham's use of the bile dye, tetraiodophenolphthalein.

1927—The introduction of liver extracts in the treatment of anemia, by Minot, Murphy and Cohn.

1929—Theelin isolated from urine of pregnant women, by Doisy, Veler and Thayer.

1931—Introduction of sodium pentothal as an anesthetic.

1933—Surgical pneumonectomy first done.

1934—Discovery that amidopyrine and similar drugs were the cause of agranulocytopenia, by Madison and

Squire, and aided by Kracke and Parker, of Emory University.

1938—Value of nicotinic acid in pellagra established.

1939—Metrazol shock treatment introduced.

1944—Beginning the use of penicillin.

1947—Beginning the use of streptomycin.

The employment of these antibiotics and newer drugs has created the most remarkable revolution in medicine since the advent of anesthesia

and antisepsis, surgery being especially affected, due to the elimination of many operations which formerly were considered necessary for a cure. While the results at present seem but little short of miraculous in some cases, the introduction of the agents is too recent to permit evaluation of their final permanent place in therapeutics.

FRANK K. BOLAND, M.D.

PRESIDENT'S PAGE

MEDICINE VERSUS POLITICS

The primary desire of men of medicine, since the earliest days of the profession, has been to be allowed to care for their patients without undue interference. They have had no desire to enter into politics. Many have felt that to take any active part in politics would be detrimental to the high regard in which the profession was held by people of all parties and political opinions. They have held the opinion that the high ideals and aims of the medical profession were immune to political pressure. This attitude is no longer tenable.

Without any volition on their part the doctors have been forced into politics. They are the chief point of attack by the enemies of individual freedom. They must become the leaders of those who desire to see this freedom maintained. The question is not

shall doctors take an active part in politics but how effectively can they meet this new responsibility now being thrust upon them.

The medical profession's potential political influence is enormous. Acting as a united force on a local, State or National level, they can swing the balance for or against any candidate or group. To accomplish this they must be well informed and willing to sacrifice a part of their time from the practice of medicine for the benefit of the practice of medicine, *and for the benefit of all citizens.*

They have the intelligence, they have the ability, they have the sources of information and the organization. Will they use these to the utmost or will they allow their enemies to trample them underfoot? There can be but one answer.

ENOCH CALLAWAY, M.D.

THE JOURNAL

OF THE
MEDICAL ASSOCIATION OF GEORGIA

EDGAR D. SHANKS, M.D., Editor
478 Peachtree Street, N. E., Atlanta, Ga.

MARCH, 1950

PROGRAM FOR 100TH ANNUAL SESSION

Elsewhere in this *Journal* will be found the program for the 100th annual session of the Association; also the program for the Woman's Auxiliary to the Association.

The Medical Association of Georgia is now 101 years old, but its records show, in so far as they are available, that 99 annual sessions have been held. The session planned for 1945, in Macon, was cancelled on order of the Office of Defense Transportation, Washington, D. C.

Complete your plans to attend this historic session. If for any reason you experience trouble in obtaining proper accommodations, communicate with the Committee on Hotels of the Bibb County Medical Society, Macon.

A.M.A. JOURNAL REFUTES MEDICAL EDUCATION CRITICISM

The latest report from the American Medical Association's Council on Medical Education and Hospitals offers a convincing reply to critics who doubt the effectiveness of the present orderly progression in medical education to meet the health needs of the nation, says an editorial in the February 11 *Journal of the A.M.A.*

The editorial follows:

In recent discussions concerning the supply of physicians some critics of the present methods of training have compared the number of medical students enrolled in the medical schools in the United States today with the number enrolled in 1905, the first year for which accurate data for student enrolments are available. They claim that today's enrolment is smaller.

While the American Medical Association, the Association of American Medical Colleges and others concerned with medical education have pointed out repeatedly that many of the medical students of the earlier period were enrolled in substandard schools and could not therefore be considered the equivalent of medical students in

the present day approved schools, quantitative studies on this point have not been made until recently.

The Council on Medical Education and Hospitals of the American Medical Association has just made a study to determine the comparative enrolments in approved medical schools during the 40 years since 1910, when the Council published its first list of approved medical schools.

This study reveals that in 1910 there were 66 class A medical schools with a total enrolment of 12,530 students; in 1920 there were 70 class A medical schools with a total enrolment of 12,559 students; in 1930 there were 76 approved medical schools with a total enrolment of 21,597; in 1940 there were 77 approved medical schools with a total enrolment of 21,271; in 1950 there are 79 approved medical schools with an estimated total enrolment of 24,800 students.

These data clearly show that the opportunities to study medicine in approved medical schools have practically doubled in the last 40 years and have more than kept pace with the growth in population.

The number of physicians per 100,000 population in the United States declined from 149 in 1909 to 125 in 1929. Since 1929 the ratio has steadily risen to 137 in 1949. These new data showing the increasing number of students enrolled in approved medical schools reveal clearly that the decline in the physician-population ratio from 1909 to 1929 was due entirely to the closing of substandard medical schools. A physician-population ratio that included only physicians who were graduated from approved medical schools would reveal a steadily rising trend in the past four decades.

Even the poorest of the approved medical schools today have better staffs and facilities than most of the approved medical schools of 30 or 40 years ago, and the leadership of the medical profession and the medical colleges has resulted in the training of a greatly increased number of well qualified physicians to serve the American people.

This accomplishment is important in the increasing life expectancy. In the last 40 years life expectancy at birth in the United States has increased more than 17 years. This accomplishment also is important in the reduction of maternal mortality, which in the last 20 years has been reduced by more than 85 per cent. and has influenced considerably the over-all crude death rate for the nation, which has shown a gradual decrease despite the aging of the population.

The general health of the population of the United States is constantly improving. No one can deny this without resorting to falsification. Those who claim that a health crisis exists in this country cannot prove it, and yet by inference, and often more directly, they plead a crisis to bolster their arguments for enlargement of medical schools and increase in enrolments of stu-

dents.

The latest report from the Council on Medical Education offers a convincing reply to those who doubt the effectiveness of the present orderly progression in medical education to meet the health needs of the nation. To heed the pleas of those who would discard order for chaos would cause a farrago that would return the level of medical education and care to that of several decades ago.

USE PENICILLIN TO PREVENT RHEUMATIC FEVER RECURRENCE

Encouraging results from use of penicillin to prevent recurrence of rheumatic fever in children are reported by a Chicago research group.

"The recurrence rate was zero in the penicillin-treated group compared with 11 and 19 per cent in control groups," Kate H. Kohn, M.D., Albert Milzer, Ph.D., and Helen MacLean, A.B., of Michael Reese Hospital say. Their study appears in the January 7 *Journal of the American Medical Association*.

Rheumatic fever commonly affects children and often results in permanent and serious damage to the heart. The disease is related to infection of the upper respiratory tract with streptococcus microbes.

All the children studied had recovered from an acute attack of rheumatic fever and were living in their own homes and attending public school.

"They present a different problem from children residing in the controlled atmosphere of the hospital or convalescent home, not only because they are exposed to infections prevalent in the general community, but also because medical care, especially of seemingly mild upper respiratory infections, infrequently is delayed," the researchers say.

A hundred and twenty-six children were chosen and divided into two groups equal in sex, race, age and economic level. One group received penicillin tablets for periods covering a week or more of each month during three school years. The second group received no medication. A third and comparable group also was used as a control.

The penicillin was effective in significantly reducing the incidence of streptococcal infections in the throats of the children, the researchers found.

This observation and the difference in recurrence rates in the penicillin-treated group and the non-treated groups are "sufficiently encouraging to warrant continued study," the researchers say.

LACK OF CALCIUM IS COMMON DIETARY DEFICIENCY

American habits of diet make calcium deficiency a common defect of nutrition in this country, according to a report to the Council on

Foods and Nutrition of the American Medical Association.

The report, written by Genevieve Stearns, Ph.D., of the State University of Iowa College of Medicine, Iowa City, appears in the February 18 *Journal of the American Medical Association*.

"Milk and its derivatives, such as cheese and ice cream, are the chief sources of calcium in the diet and provide ample phosphorus for its utilization," the report points out.

"Other protein-rich foods, such as meat, eggs, fish and cereals, add little or no calcium to the diet."

Overweight individuals (principally adults) who must cut down on the food they eat can get their full quota of milk minerals from buttermilk or skimmed milk.

Maintenance of an adequate supply of vitamin D is important in regulating the ability of the body to absorb and retain calcium, the report emphasizes. Sometimes called the "sunshine vitamin," vitamin D is found in fish liver oils and vitamin D fortified milk and is produced in the body on exposure to sunlight. Some other foods, such as butter and egg yolk, contain small amounts of the vitamin but are unreliable sources.

The report recommends that to obtain adequate calcium, healthy adults drink a pint of milk and eat a serving of milk products (such as cheese, ice cream or coffee-flavored milk) daily. Three glasses of milk provide an ample daily intake of calcium for average adults, according to Dr. Stearns.

Drinking one quart of milk daily provides an ample amount of calcium for children and adolescents, the report says. Calcium intake can be substantially increased by liberal use of evaporated milk instead of cream in coffee.

American eating habits and wide distribution in foods make dietary deficiency of phosphorus and magnesium unlikely in this country, according to the report.

"The supply of bone-building minerals (principally calcium) during periods of growth is an important factor in determining the eventual stature of a person," the report says. "Study of dietary habits of various groups tends to show that peoples whose diets provide adequate calories, protein and calcium are tall in stature and those whose diets are poor in these substances tend not only to be short in stature but small framed, with finer bone structure.

"If children of such small skeletoned peoples are more liberally fed, significant increase in stature is observed even in one generation. It is not the province of this review to discuss the proper height or skeletal size of the American people, yet to speak of requirement of these substances for any age group presupposes a standard both for final stature and for rate of skeletal growth.

"The discussion of requirements herein has been based primarily on growth rates of nutritionally favored population groups. The term allowance as used by the National Research Council is probably preferable to the term requirement. Certainly, a considerable part of our own population has lived to maturity, reared children and died without ever achieving a daily intake as recommended here.

"It is equally certain that a considerable percentage of our population shows some degree of malnutrition, as judged by present standards. The prevalence of osteoporosis in older persons is often considered evidence of such malnutrition.

"Whether better dietary habits, including a more ample intake of bone-building materials, will result in a more vigorous old age remains to be proved. The evidence is strong that better nutrition is one of the chief factors in the increase of stature and rate of growth of present day Americans over those of 50 years ago. As the mean age of our population increases, we are concerned with postponement of senescence. Maintenance of a well mineralized skeleton throughout adult life may well be a factor in the maintenance of physical vigor into old age.

"Our present knowledge of the requirements for skeletal minerals can be summarized simply. Ample evidence exists that deficiency of intake or utilization of these minerals results in slowing of growth and lengthening of the growth period; it is possible that such deficiencies in adult life may hasten senescence. There is no evidence of any ill effects from ample intake of these substances over long periods of time. The evidence favors strongly the maintenance of an adequate, even ample, intake of these minerals throughout the entire life span."

A.M.A. COUNCIL SUMMARIZES RESEARCH ON VITAMIN E THERAPY

Protagonists of vitamin E therapy have not reported any results derived from critical clinical tests, says a report of the Council on Pharmacy and Chemistry of the American Medical Association.

The report, which appears in the February 18 *Journal of the A.M.A.*, says in part:

"More than three years ago, stories appeared concerning a remarkable new treatment for patients with circulatory disease. The treatment was said to have been discovered by some investigators in London, Canada. It was alleged that large doses of vitamin E could effect remarkable recoveries in patients with a wide variety of cardiovascular disorders who had not been benefited by more orthodox therapy.

"The protagonists of vitamin E therapy have not reported any results derived from critical clinical tests, although medical and lay literature

contain reports which, to the uncritical, might appear to lend support to the hypothesis that vitamin E is useful in the treatment of heart disease.

"It is regrettable that the hopes of sufferers from heart disease and other cardiovascular conditions, as well as those of countless diabetic persons, should be falsely raised by unbridled enthusiasm."

The A.M.A. report cites a number of "carefully conducted and adequately controlled" studies which, according to the Council on Pharmacy and Chemistry, failed to substantiate early reports of the usefulness of vitamin E in heart disease and diabetes.

SURGEONS TATTOO EYEBALL IN NEWER SIGHT-GIVING OPERATION

Blindness caused by a film or opacity over the eye (not a cataract) can be relieved by a newer operation described in the February issue of *Hygeia*, health magazine of the American Medical Association.

"Usually a patient who can be helped by this operation suffers from vision so reduced that he is unable to pursue a gainful occupation requiring the use of the eye," says Dr. Arthur A. Knapp of New York.

"The operation is suitable if the patient's minimum sight permits him to distinguish between day and night. A healthy retina is necessary for a good result.

"The cloudy area of the cornea is tattooed and then an operation is performed to create a new aperture or pupil. The eye is not tattooed with needles. That method has been outmoded; it has been superseded by chemicals.

"Fundamentally, the chemical solutions are applied on the outside of the eyeball to change the whitish film of the cornea to a dark color. The reason for this is that the whitened cornea acts like a ground glass to scatter the incoming rays of light; it disperses the rays all over the back of the eye instead of focusing them distinctly on that vital visual spot in the center of the retina.

"The result is glare and poor vision. Tattooing does away with these troublesome rays of light. The chemically treated area absorbs them. The surgeon has a choice of colors; he may use black, brown or blue, depending on the background of the patient's eye.

"At conversational distance the tattooed area cannot be distinguished. The eye looks normal.

"This newer method is a definite advance in the forward march of surgery. It gives a high percentage of excellent results, and the range of its applicability is very wide. It is devoid of the hazards of a delicate and intricate technique. Much more blindness can now be cured. At a conservative estimate, vision is improved in 95 per cent of patients."

OFFICERS OF THE MEDICAL ASSOCIATION OF GEORGIA



ENOCH CALLAWAY, M.D.
LaGrange
President, 1949-1950



ALPHEUS MAYNARD PHILLIPS, M.D.
Macon
President-Elect 1949-1950



Ralph O. Bowden, M.D.
Savannah
First Vice-President



H. Walker Jernigan, M.D.
Atlanta
Second Vice-President



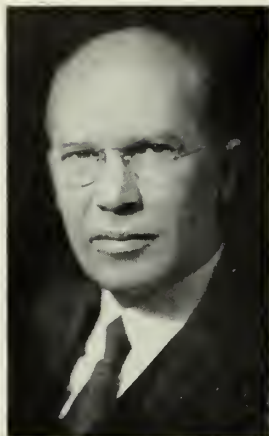
Edgar Shanks, M.D., Atlanta
Secretary-Treasurer and
Editor of The Journal



John W. Simmons, M.D.
Brunswick, Parliamentarian

The officers of the Medical Association of Georgia urge its members to attend the One Hundredth Annual Session of the Association, Macon, April 18-21, 1950. Note pages 124-127 of this *Journal*.

The House of Delegates will convene, Tuesday, April 18, at 2:00 p.m. at the City Auditorium. The scientific session will open April 19, at 8:30 a.m., at the City Auditorium.



Allen H. Bunce, M.D.
Atlanta
Delegate to the A.M.A.



C. H. Richardson, Sr., M.D.
Macon
Delegate to the A.M.A.



Benj. H. Minchew, M.D.
Waycross
Delegate to the A.M.A.



Wm. R. Dancy, M.D.
Savannah
Alt. Delegate to the A.M.A.



Walter W. Daniel, M.D.
Atlanta
Alt. Delegate to the A.M.A.



C. L. Ayers, M.D.
Toccoa
Alt. Delegate to the A.M.A.



Lee Howard, M.D.
Savannah
Councilor, First District



C. K. Wall, M.D.
Thomasville
Councilor, Second District



W. G. Elliott, M.D.
Cuthbert
Councilor, Third District



J. W. Chambers, M.D.
LaGrange
Councilor, Fourth District



Marion C. Pruitt, M.D.
Atlanta
Councilor, Fifth District



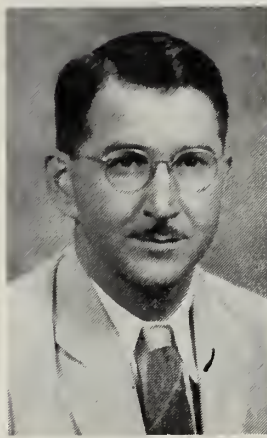
H. D. Allen, Jr., M.D.
Milledgeville
Councilor, Sixth District



D. Lloyd Wood, M.D.
Dalton
Councilor, Seventh District



Wm. F. Reavis, M.D.
Waycross
Councilor, Eighth District



Bruce Schaefer, M.D.
Toccoa
Councilor, Ninth District



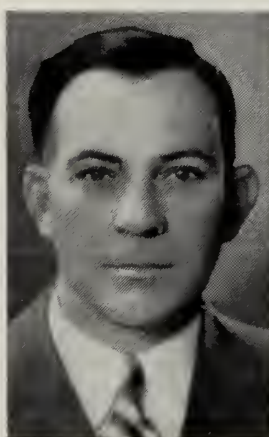
H. L. Cheves, M.D.
Union Point
Councilor, Tenth District



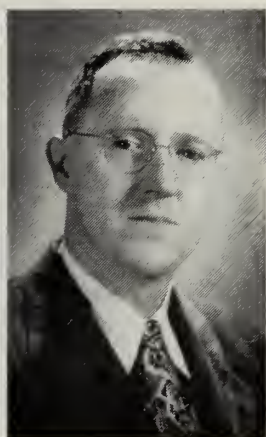
Chas. T. Brown, M.D.
Guyton
Vice-Councilor, First District



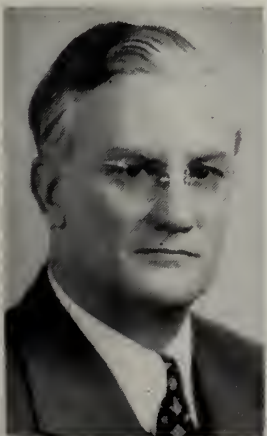
Chas. H. Watt, M.D.
Thomasville
Vice-Councilor, Second District



Guy J. Dillard, M.D.
Columbus
Vice-Councilor, Third District



Clarence B. Palmer, M.D.
Covington
Vice-Councilor, Fourth District



David Henry Poer, M.D.
Atlanta
Vice-Councilor, Fifth District



H. G. Weaver, M.D.
Macon
Vice-Councilor, Sixth District



M. M. Hagood, M.D.
Marietta
Vice-Councilor, Seventh District



Alton M. Johnson, M.D.
Valdosta
Vice-Councilor, Eighth District



D. H. Garrison, M.D.
Clarkesville
Vice-Councilor, Ninth District



J. Victor Roule
Augusta
Vice-Councilor, Tenth District



Viola Berry
Atlanta
Executive Secretary

ONE HUNDREDTH ANNUAL SESSION

Macon

April 18, 19, 20, 21, 1950

Officers

President..... Enoch Callaway, LaGrange
President-Elect..... A. M. Phillips, Macon
First Vice-President..... Ralph O. Bowden, Savannah
Second Vice-President..... H. Walker Jernigan, Atlanta
Parliamentarian..... Jno. W. Simmons, Brunswick
Secretary-Treasurer..... Edgar D. Shanks, Atlanta

Delegates to A. M. A.

B. H. Minchew (1948-1950)..... Waycross
Alternate, W. R. Dancy..... Savannah
Allen H. Bunce (1948-1950)..... Atlanta
Alternate, Walter W. Daniel..... Atlanta
C. H. Richardson, Sr. (1950-1951)..... Macon
Alternate, C. L. Ayers..... Toccoa

Council

W. F. Reavis, Chairman..... Waycross
Marion C. Pruitt, Clerk..... Atlanta

Councilors

1. Lee Howard (3 years)..... Savannah
2. C. K. Wall (3 years)..... Thomasville
3. W. G. Elliott (3 years)..... Cuthbert
4. J. W. Chambers (3 years)..... LaGrange
5. Marion C. Pruitt (1 year)..... Atlanta
6. H. D. Allen, Jr. (1 year)..... Milledgeville

7. D. Lloyd Wood (1 year)..... Dalton
8. W. F. Reavis (1 year)..... Waycross
9. Bruce Schaefer (2 years)..... Toccoa
10. H. L. Cheves (2 years)..... Union Point

Vice-Councilors

1. Chas. T. Brown..... Guyton
2. C. H. Watt..... Thomasville
3. Guy J. Dillard..... Columbus
4. Clarence B. Palmer..... Covington
5. D. Henry Poer..... Atlanta
6. H. G. Weaver..... Macon
7. M. M. Hagood..... Marietta
8. Alton M. Johnson..... Valdosta
9. D. H. Garrison..... Clarkesville
10. J. Victor Roule..... Augusta

Executive Committee

Enoch Callaway, President..... LaGrange
W. F. Reavis, Chairman, Council..... Waycross
Edgar D. Shanks, Secretary-Treasurer..... Atlanta

Honorary Advisory Board

W. S. Goldsmith..... President, 1915-1916
Eugene E. Murphy..... President, 1917-1918
J. W. Palmer..... President, 1918-1919
J. W. Daniel..... President, 1923-1924
Frank K. Boland..... President, 1925-1926
C. K. Sharp..... President, 1928-1929
Wm. R. Dancy..... President, 1929-1930
M. M. Head..... President, 1932-1933
C. H. Richardson..... President, 1933-1934
Clarence L. Ayers..... President, 1934-1935
James E. Paullin..... President, 1935-1936
B. H. Minchew..... President, 1936-1937
Grady N. Coker..... President, 1938-1939
J. C. Patterson..... President, 1940-1941
Allen H. Bunce..... President, 1941-1942
James A. Redfearn..... President, 1942-1943
W. A. Selman..... President, 1943-1944
Cleveland Thompson..... President, 1944-1946
Ralph H. Chaney..... President, 1946-1947
Steve P. Kenyon..... President, 1947-1948
Edgar H. Greene..... President, 1948-1949

BIBB COUNTY MEDICAL SOCIETY

Officers and Committees

President..... C. H. Richardson, Jr., Macon
President-Elect..... Robert W. Edenfield, Macon
Vice-President..... John I. Hall, Macon
Secretary-Treasurer..... Henry H. Tift, Macon
Delegate..... J. B. Kay, Byron
Delegate..... J. D. Applewhite, Macon
Alternate Delegate..... C. N. Wasden, Macon
Alternate Delegate..... W. W. Baxley, Macon
Censors: C. H. Richardson, Sr.; Wallace L. Bazemore,
and W. W. Baxley.

COMMITTEES

All of Macon

General Committee

Leon Porch, Chairman; Henry H. Tift, C. H. Richardson, Robert W. Edenfield, Willard R. Golsan, and Robert W. McAllister.

Hotels

J. Benham Stewart, Chairman; R. M. Reifler, John P. Jones, E. C. McMillan, and Alvin E. Siegel.

Entertainment

Robert W. McAllister, Chairman; Charles C. Benton, Edwin R. Watson, Leo J. Blum, Jr., L. P. James, and W. Holloway Bush.

Alumni Dinner

University of Georgia School of Medicine
H. G. Weaver, Chairman; W. W. Baxley, Evelyn Swilling, Jule C. Neal, and Frank Vinson.

Alumni Dinner

Emory University School of Medicine
W. C. Boswell, Chairman; J. B. Kay, E. A. Brannen, Ralph G. Newton, J. L. King, and E. C. McMillan.

Publicity

C. N. Wasden, Chairman; Milford B. Hatcher, W. K. Jordan, Samuel E. Patton, and W. D. Hazlehurst.

Golf

Carl L. Anderson, Chairman; C. Hall Farmer, W. A. Newman, Ernest Corn, Raymond Suarez, and C. H. Richardson, Sr.

Transportation

W. Earl Lewis, Chairman; C. L. Ridley, Jr., W. D. Jarratt, John T. DuPree, and W. L. Barton.

MEDICAL ASSOCIATION OF GEORGIA

COMMITTEES

Scientific Work

Carter Smith, Chairman Atlanta
W. C. McGeary Madison
Richard Torpin Augusta
Edgar D. Shanks Atlanta

Public Policy and Legislation

S. A. Kirkland, Chairman (1950) Atlanta
Jack C. Norris (1951) Atlanta
James A. Johnson, Jr. (1952) Manchester
T. F. Sellers Atlanta
Enoch Callaway LaGrange
Edgar D. Shanks Atlanta

Medical Defense

M. C. Pruitt, Chairman Atlanta
B. H. Minchew Waycross
Marcus Mashburn Cumming
W. F. Reavis Waycross
Edgar D. Shanks Atlanta

Advisory State Board of Health

Edgar H. Greene, Chairman Atlanta
H. G. Weaver Macon
D. H. Garrison Clarkesville
Marcus Mashburn Cumming
R. K. Winston Tifton
O. R. Styles Cedartown
J. C. Brim Pelham
C. S. Pittman Tifton
C. L. Ayers Toccoa
W. G. Elliott Cuthbert
C. Purcell Roberts Atlanta
B. Russell Burke Atlanta

Medical Education and Hospitals

R. Hugh Wood, Chairman Emory University
G. Lombard Kelly Augusta
Julian K. Quattlebaum Savannah
Ernest F. Wahl Thomasville
J. A. Thrash Columbus
C. Mark Whitehead LaGrange
L. Minor Blackford Atlanta
B. T. Beasley Atlanta
Charles B. Fulghum Milledgeville
John T. McCall, Jr. Rome
A. G. Little, Jr. Valdosta
Marcus Mashburn, Jr. Cumming
Sam Talmadge Athens
Richard B. Wilson Atlanta
Hervey M. Cleckley Atlanta
Albert F. Brawner Atlanta

Abner Wellborn Calhoun Lectureship

James E. Paullin, Chairman Atlanta
J. R. Broderick Savannah
Eugene E. Murphey Augusta
Frank K. Boland Atlanta
Guy O. Wheelchel Athens
J. Calhoun McDougall Atlanta

Memorial Exercises

M. Preston Agee, Chairman Augusta
Ruskin King Savannah
J. C. Patterson Cuthbert
George H. Lang Savannah
Frank K. Boland Atlanta
J. R. S. Mays Macon
M. T. Edgerton Atlanta
Marion McH. Hull Atlanta

Medical History of Georgia

Frank K. Boland, Chairman Atlanta
Allen H. Bunce Atlanta

J. Calvin Weaver Atlanta
T. F. Abercrombie Decatur
Eugene E. Murphey Augusta
William R. Dancy Savannah
McClaren Johnson Atlanta

Orthopedics

Fred G. Hodgson, Chairman Atlanta
Thomas P. Goodwyn Atlanta
F. Bert Brown Savannah
J. Hiram Kite Atlanta
L. H. Muse Atlanta
Peter B. Wright Augusta
W. A. Newman Macon
H. Walker Jernigan Atlanta
Ed Irwin Warm Springs
W. L. Funkhouser Atlanta
Lawson Thornton Atlanta

Industrial Health

J. Harry Rogers, Chairman Atlanta
Thomas P. Goodwyn Atlanta
T. V. Willis Brunswick
L. M. Petrie Atlanta
W. W. Battey Augusta
Chas. E. Lawrence Atlanta
W. A. Newman Macon
C. F. Holton Savannah
John P. Garner Atlanta
J. H. Mull Rome
Rufus Askew Atlanta
Harry Talmadge Athens

Student Loan Fund

Mrs. Lon King, Chairman Macon
G. Lombard Kelly Augusta
R. Hugh Wood Atlanta

Scientific Exhibits

Robert B. Greenblatt, Chairman Augusta
J. Elliott Scarborough Emory University
Marion T. Benson, Jr. Atlanta
Lee Howard Savannah
Helen W. Bellhouse Atlanta
J. K. Quattlebaum Savannah
J. Hiram Kite Atlanta
Don F. Cathcart Atlanta
Clair A. Henderson Savannah
Estelle P. Boynton Atlanta

Medical Preparedness

John B. Fitts, Chairman Atlanta
A. O. Linch Atlanta
Edgar D. Shanks Atlanta

Post-Graduate Study

G. Lombard Kelly, Chairman Augusta
R. Hugh Wood Emory University
R. H. Oppenheimer Atlanta
Thomas Ross, Jr. Macon
Hollis Hand LaGrange
Richard Torpin Augusta
Cleveland Thompson Millen
C. H. Richardson, Jr. Macon
Robert Martin, III Cuthbert
W. F. Reavis Waycross
Vernon E. Powell Atlanta
John Sharpley Savannah
McClaren Johnson Atlanta

*Liaison Committee**Georgia State Medical Association
(Negro)*

J. R. McCord, Chairman Atlanta
W. E. Storey Columbus
Lee H. Battle, Jr. Rome
J. F. Hanson Macon
H. H. Allen Decatur
E. Van Buren Atlanta

Pediatrics

W. W. Anderson, Chairman Atlanta
Philip Mulherin Augusta
Frank Schley Columbus
Hall Farmer Macon

M. M. McCord	Rome
Howard J. Morrison	Savannah
R. W. Fowler	Marietta
A. M. Johnson	Valdosta

Awards

William R. Dancy, Chairman	Savannah
T. Schley Gatewood	Americus
M. M. McCord	Rome
T. C. Williams	Valdosta
Henry M. Moore	Thomasville
J. Dean Paschal	Dawson
W. J. Cranston	Augusta
Francis Martin	Shellman
T. Luther Byrd	Atlanta

Cancer Commission

Everett L. Bishop, Chairman	Atlanta
James J. Clark	Atlanta
J. Elliott Scarborough	Emory University
R. C. Pendergrass	Americus
Thomas Harrold	Macon
D. Henry Poer	Atlanta
Enoch Callaway	LaGrange
Lee Howard	Savannah
W. F. Jenkins	Columbus
D. Lloyd Wood	Dalton
J. T. McCall	Rome
Chas. R. Andrews, Jr.	Canton
Hoke Wammock	Augusta
John H. Sherman	Augusta
Calvin Stewart	Atlanta
D. M. Bradley	Waycross
F. G. Eldridge	Valdosta
Maxwell Berry	Atlanta
John Funke	Atlanta
Sam Talmadge	Athens
W. J. Murphy	Atlanta
J. J. Collins	Thomasville
Wadley Glenn	Atlanta

Advisory Woman's Auxiliary

Murdock Euen, Chairman	Atlanta
Eustace Allen	Atlanta
Bruce Schaefer	Toccoa
Ralph H. Chaney	Augusta
C. F. Holton	Savannah
Thomas Ross, Jr.	Macon
J. Harry Rogers	Atlanta
W. G. Elliott	Cuthbert
Shelley C. Davis	Atlanta

Revision of Pharmacopeia of U. S.

C. C. Aven, Chairman (1959)	Atlanta
Allen H. Bunce (1959)	Atlanta
Hal M. Davison (1959)	Atlanta

Prepayment Medical Care Plans

W. S. Dorough, Chairman	Atlanta
John L. Elliott	Savannah
Steve P. Kenyon	Dawson
Kenneth D. Grace	LaGrange
A. M. Phillips	Macon
P. O. Chaudron	Cedartown
W. L. Pomeroy	Waycross

Committee to Revise the Constitution

D. Henry Poer, Chairman	Atlanta
Allen H. Bunce	Atlanta
L. Minor Blackford	Atlanta
Bruce Schaefer	Toccoa
Charley K. Wall	Thomasville
J. W. Simmons	Brunswick
W. R. Minnich	Atlanta
Peter B. Wright	Augusta
John Elliott	Savannah
A. M. Phillips	Macon
John A. Dunaway, Attorney for Association	Atlanta

*Liaison Committee of 53 Constituent**State Medical Associations to Coordinate Educational Program of A. M. A.*

Jack C. Norris	Atlanta
----------------------	---------

Public Relations

Eustace Allen, Chairman	Atlanta
W. W. Daniel	Atlanta
W. G. Elliott	Cuthbert
J. E. Penland	Waycross
W. D. Hall	Calhoun
Thomas Ross, Jr.	Macon
Hartwell Joiner	Gainesville
Ralph H. Chaney	Augusta
Emery C. Herman	LaGrange

Group Insurance

John W. Turner, Chairman	Atlanta
Kenneth S. Hunt	Griffin
James H. Arnold	Newnan

Medical Civilian Preparedness

Edgar M. Dunstan, Chairman	Atlanta
Robert W. Candler	Atlanta
Charles E. Dowman	Atlanta
Joseph S. Skobba	Atlanta
Walter M. Bartlett	Atlanta

Fraternal Delegates to Other States

Alabama—M. M. Head, Zebulon; John E. Walker, Columbus; D. S. Reese, Carrollton; H. B. Jenkins, Donaldsonville.

Florida—W. W. Anderson, Atlanta; Jas. L. Campbell, Jr., Valdosta; T. J. Ferrell, Waycross; J. C. Keaton, Albany.

North Carolina—James H. Semans, Atlanta; J. Hubert Milford, Hartwell; Hartwell Joiner, Gainesville; D. N. Thompson, Elberton.

South Carolina—R. G. Stephens, Washington; F. H. Killam, Greensboro; D. R. Thomas, Augusta; Anne Hopkins, Savannah.

*STATE BOARD OF HEALTH**

First District: James M. Byne, Jr., Waynesboro, Sept. 1, 1951.

Second District: C. K. Sharp, Arlington, Sept. 1, 1951.

Third District: R. C. Montgomery, Butler, Sept. 1, 1954.

Fourth District: M. M. Head, Zebulon, Sept. 1, 1955.

Fifth District: Spencer A. Kirkland, Atlanta, Sept. 1, 1954.

Sixth District: C. L. Ridley, Macon, Sept. 1, 1950.

Seventh District: W. P. Harbin, Jr., Rome, Sept. 1, 1950.

Eighth District: B. H. Minchew, Waycross, Sept. 1, 1950.

Ninth District: Robert L. Rogers, Gainesville, Sept. 1, 1951.

Tenth District: Thos. W. Goodwin, Augusta, Sept. 1, 1955.

*STATE OF GEORGIA AT LARGE****Georgia Dental Association*

W. K. White, Savannah, Sept. 1, 1951.

J. G. Williams, Atlanta, Sept. 1, 1951.

Georgia Pharmaceutical Association

George Wright, Tifton, Sept. 1, 1953.

J. B. Butts, Milledgeville, Sept. 1, 1953.

*Nominated by their respective district medical societies and appointed for six-year terms.

**Nominated by their respective associations.

STATE BOARD OF MEDICAL EXAMINERS

J. W. Palmer	Ailey
Steve P. Kenyon	Dawson
Grady N. Coker	Canton
Edgar H. Greene	Atlanta
R. H. McDonald	Newnan
Phil E. Roberson	Albany
Fred J. Coleman	Dublin
Alexander B. Russell	Winder
Rufus A. Askew	Atlanta
W. H. Powell	Hazlehurst

*DISTRICT SOCIETIES**OFFICERS AND MEETING DATES**First District*

President—A. Bird Daniel, Statesboro

Secretary—Wm. H. Fulmer, Savannah

Third Wednesday—March and July.

Second District

President—J. C. Brim, Pelham
 Secretary—Frank A. Little, Thomasville
 Second Thursday—April and October.

Third District

President—Carl P. Savage, Montezuma
 Secretary—T. Schley Gatewood, Americus
 Third Wednesday in June—Second Wednesday in November.

Fourth District

President—Harry C. King, Griffin
 Secretary—H. Hilt Hammett, Jr., LaGrange
 Second Wednesday—February and August.

Fifth District

President—Carter Smith, Atlanta
 Secretary—L. M. Blackford, Atlanta.
 No set dates.

Sixth District

President—John I. Hall, Macon
 Secretary—A. M. Phillips, Macon
 Last Wednesday in June—First Wednesday in December.

Seventh District

President—S. M. Howell, Cartersville
 Secretary—S. B. Kitchens, Lafayette
 First Wednesday in April—last Wednesday in September.

Eighth District

President—J. B. Avera, Brunswick
 Secretary—James L. Campbell, Jr., Valdosta
 Second Tuesday—April and October.

Ninth District

President—R. E. Shiflet, Toccoa
 Secretary—Hartwell Joiner, Gainesville
 Dates not specified.

Tenth District

President—M. C. Adair, Washington
 Secretary—A. W. Simpson, Jr., Washington
 Second Wednesday—February and August.

DELEGATES TO THE 1950 SESSION

<i>Counties</i>	<i>Names and Addresses</i>
Appling	James A. Bedingfield, Baxley
Baldwin	Y. H. Yarbrough, Milledgeville
Banks	J. S. Jolley, Homer
Bartow	
Ben Hill	
Bibb	J. D. Applewhite, Macon
	J. B. Kay, Byron
Blue Ridge	
Brooks	L. A. Smith, Quitman
Bulloch-Candler-Evans	Louie H. Griffin, Claxton
Burke	J. M. Byne, Jr. Waynesboro
Carroll-Douglas-Haralson	Roy L. Denney, Carrollton
Chatham	
Georgia Medical Society	John L. Elliott, Savannah
	Ruskin King, Savannah
	Ralph O. Bowden, Savannah
Chattooga	G. H. Little, Trion
Cherokee-Pickens	
Clarke	M. A. Hubert, Athens
Clayton-Fayette	Y. R. Coleman, Fayetteville
Cobb	
Coffee	L. H. Shellhouse, Willacoochee
Colquitt	
Columbia	
Coweta	H. D. Meaders, Newnan
Crisp	P. L. Williams, Cordele
Decatur-Seminole	Harry B. Baxley, Donalsonville
DeKalb	John T. Leslie, Decatur
Dooly	O. K. Coleman, Vienna
Dougherty	Paul T. Russell, Albany
Elbert	
Emanuel	D. D. Smith, Swainsboro
Floyd	
Forsyth	
Franklin	
Fulton	A. O. Lynch, Atlanta
	Stephen T. Brown, Atlanta
	Hal M. Davison, Atlanta
	Eustace A. Allen, Atlanta
	A. Worth Hobby, Atlanta

William C. Hamm, Atlanta
 Jack C. Norris, Atlanta
 Cyrus W. Strickler, Jr., Atlanta
 John W. Turner, Atlanta
 Major F. Fowler, Atlanta
 Shelley C. Davis, Atlanta
 J. D. Martin, Jr., Atlanta
 C. Purcell Roberts, Atlanta
 Thomas W. Collier, Brunswick

Glynn	
Gordon	
Grady	
Greene	
Gwinnett	
Habersham	J. L. Walker, Clarkesville
Hall	Billy S. Hardman, Gainesville
Hancock	C. S. Jernigan, Sparta
Hart	
Henry	
Houston-Peach	A. Smoak Marshall, Fort Valley
Jackson-Barrow	
Jasper	
Jefferson	
Jenkins	H. G. Lee, Millen
Lamar	
Laurens	
Macon	
McDuffie	
Meriwether-Harris	C. E. Irwin, Warm Springs
Mitchell	J. C. Brim, Pelham
Monroe	
Montgomery	J. W. Palmer, Ailey
Morgan	W. C. McGeary, Madison
Muscogee	
Newton	
Ocmulgee	
	Bleckley-Dodge-Pulaski
Polk	W. H. Lucas, Cedartown
Rabun	
Randolph-Terrell	Robert B. Martin, III, Cuthbert
Richmond	Robert C. McGahee, Augusta
	David R. Thomas, Jr., Augusta
	John M. Martin, Augusta
Rockdale	Harvey E. Griggs, Conyers
Screven	
South Georgia	Berrien-Clinch-Cook-Echols-
	Lanier-Lowndes
	A. G. Little, Jr., Valdosta
Spalding	Kenneth S. Hunt, Griffin
Stephens	Robert E. Shiflet, Toccoa
Sumter	
Tattnall	A. G. Pinkston, Jr., Glennville
Taylor	R. C. Montgomery, Butler
Telfair	S. T. Parkerson, McRae
Thomas	Rudolph Bell, Thomasville
Tift	Eugene M. Flowers, Tifton
Toombs	H. D. Youmans, Lyons
Tri-County:	
	Calhoun-Early-Miller
	J. G. Standifer, Blakely
Tri-County:	Liberty-Long-McIntosh
Troup	
Turner	
Upson	
Walker-Catoosa-Dade	Fred H. Simonton, Chickamauga
Walton	Charles S. Floyd, Loganville
Ware	W. L. Pomeroy, Waycross
Warren	
Washington	William Rawlings, Sandersville
Wayne	Robert A. Pumpelly, Jesup
Whitefield	G. L. Broadrick, Dalton
Wilcox	V. L. Harris, Rochelle
Wilkes	Albert G. LeRoy, Thomson
Worth	J. L. Tracy, Jr., Sylvester

ANNOUNCEMENTS

Be sure to go to the Registration Desk at the City Auditorium after your arrival, present your 1950 membership card, register and procure a badge and program.

Discussion of papers is open to all members and guests of the Association; it is not limited to those named on the program.

On arising to discuss a paper the speaker will please

announce his name and address clearly for the benefit of the Association and the reporter.

Meetings will be called to order at the hour fixed on the program. It is especially desired that the members be prompt in their attendance.

All manuscripts should be typewritten, double spaced, and on one side of the paper only. Papers must be handed to the reporter immediately after being read.

IMPORTANT NOTICE

Delegates must present written credentials to the Committee on Credentials of the House of Delegates to secure delegates' badges.

Members may not take part in the proceedings until they have registered and procured official badges.

PUBLIC MEETINGS

City Auditorium

WEDNESDAY, APRIL 19, 8:30 A. M.

Eastern Standard Time

Open Meeting

WEDNESDAY, APRIL 19, 8:00 P. M.

President's Address

The President's Address will be at an open session to which the public and visitors are invited.

Presentation of the President's Gold Key to President Enoch Callaway, LaGrange, by David Henry Poer, Atlanta.

THURSDAY, APRIL 20, 12:00 NOON

MEMORIAL EXERCISES

M. Preston Agee, Augusta

Chairman, Committee on Necrology

ENTERTAINMENT

At the time of going to press, plans for the various entertainments have not been completed. All such plans will be listed in the final pocket edition of the program.

MEETINGS OF THE HOUSE OF DELEGATES

City Auditorium

TUESDAY, APRIL 18, 2:00 P. M.

Eastern Standard Time

First meeting of the House of Delegates

1. Call to order by the President
2. Roll Call
3. Appointment of Reference Committees
4. Reports of officers:
 - President
 - President-Elect
 - Vice-Presidents
 - Parliamentarian
 - Secretary-Treasurer: Financial report
 - Reports of Delegates to the A.M.A.
5. Reports of committees:
 - Scientific Work
 - Public Policy and Legislation
 - Arrangements
 - Medical Defense
 - Advisory State Board of Health
 - Medical Education and Hospitals
 - Necrology
 - Cancer Commission
 - History
 - Abner Wellborn Calhoun Lectureship
 - Industrial Health
 - Awards
 - Advisory—Woman's Auxiliary
 - Medical Economics
 - Orthopedics — Advisory, State Department of Public Welfare.
 - Ophthalmology — Advisory, State Department of Public Welfare
 - Syphilis
 - Tuberculosis
 - Special Committees
6. Unfinished business.
7. New business.

TUESDAY, APRIL 18, 8:00 P. M.

Eastern Standard Time

City Auditorium

Second meeting of the House of Delegates.

1. Call to order by the President
2. Reading of minutes
3. Announcements
4. Report of President of Woman's Auxiliary
5. Reports of committees (continued)
6. Reports of Fraternal Delegates
7. Unfinished business
8. New business

FRIDAY, APRIL 21, 8:30 A. M.

Eastern Standard Time

Hotel Dempsey

Third meeting of the House of Delegates

1. Call to order by the President
2. Reading of minutes
3. Reports of committees
4. Unfinished business
5. New business.

OFFICIAL REPORTER

The Master Reporting Company, Inc.

MEETINGS OF THE COUNCIL

TUESDAY, APRIL 18, 4:30 P. M.

Eastern Standard Time

City Auditorium

The first meeting of the Council will be held Tuesday, April 18, following the afternoon session of the House of Delegates. Each Councilor will render a report of conditions of each county of his district. Other meetings of the Council will be held on the call of the chairman.

SCIENTIFIC PROGRAM

WEDNESDAY, APRIL 19, 8:30 A. M.

Eastern Standard Time

City Auditorium

The papers for each meeting *must* be read as scheduled on the program.

Call to order by the President, Enoch Callaway, LaGrange.

Invocation

REV. MACK ANTHONY, Macon

Pastor, Vineville Methodist Church

Addresses of Welcome

HON. LEWIS B. WILSON, Mayor, City of Macon

C. H. RICHARDSON, JR., Macon

President, Bibb County Medical Society

Response to Addresses of Welcome

EDGAR HILL GREENE, Atlanta

Nomination of Officers and A.M.A. Delegates

SCIENTIFIC PROGRAM

WEDNESDAY, APRIL 19, 8:30 A. M.

Eastern Standard Time

City Auditorium

The time allotted to each paper, which *INCLUDES* the showing of slides or moving pictures, is 12 minutes.

1. Further Studies on the Significance of Nipple Discharge in the Female Breast.
B. T. Beasley, Atlanta.
 2. Endometriosis: The Urgency for Early Diagnosis and Treatment.
Edgar H. Greene, Atlanta.
 3. The Routine Use of Exfoliative Cytologic Examinations for the Detection of Asymptomatic Cancer of the Cervix Uteri.
Herbert Nieburgs, Augusta.
 4. The Rh Factor.
E. B. Saye, Thomasville.
- To open the discussion of papers 1, 2, 3 and 4:
H. C. Frech, Savannah.
Max Mass, Macon.
- Recess of 15 minutes to visit exhibits.

5. The Diagnosis of Obstructive Lesions of the Gastro-Intestinal Tract of the Newborn Infant.
M. Hines Roberts, Atlanta.
 6. Diagnosis and Early Treatment of Acute Poliomyelitis.
Marvin L. Davis, Atlanta.
 7. Rehabilitation of the Crippled Child.
Harriet E. Gillette, Atlanta.
 8. Flat Feet in Children.
J. H. Kite, Atlanta.
- To open the discussion of papers 5, 6, 7 and 8:
A. M. Johnson, Valdosta.
Robert L. Bennett, Warm Springs.

WEDNESDAY, APRIL 19, 12:00 NOON

Eastern Standard Time

City Auditorium

ABNER WELLBORN CALHOUN LECTURE

Reaction and Relation of Host Cells to Viruses

THOMAS M. RIVERS

Rockefeller Institute for Medical Research,
Physician in Chief to the Rockefeller Hospital,
New York City

Introduction by Frank K. Boland, Atlanta.

WEDNESDAY, APRIL 19, 2:30 P. M.

Eastern Standard Time

City Auditorium

The time allotted to each paper, which INCLUDES the showing of slides or moving pictures, is 12 minutes.

1. Gastrosocopy in Gastric Disorders.
John S. Atwater, Atlanta.
 2. Pancreatic Disease.
Charles Hock, Augusta.
 3. Adenocarcinoma of the Colon and Rectum.
D. F. Mullins, Jr., Athens.
 4. The Choice of Operation in Gastric and Duodenal Ulcer.
C. H. Richardson, Jr., Macon.
 5. Intussusception.
John W. Turner, Atlanta.
 6. Peritoneal Drainage.
J. Benham Stewart, Macon.
 7. Studies on Gastro-Intestinal Allergy.
John L. Jacobs, Atlanta.
 8. The Color of Feces Following the Instillation of Citrated Blood at Various Levels of the Small Intestine.
J. H. Hilsman, Atlanta.
 9. The Metabolic Effects of Testosterone Propionate and Cortisone in Patients with Addison's Disease.
Harley E. Cluxton, Jr., Savannah.
- To open the discussion of above papers:
McClaren Johnson, Atlanta.
Grady Coker, Canton.

WEDNESDAY, APRIL 19, 8:00 P. M.

Eastern Standard Time

City Auditorium

President's Address

The Welfare State versus The Welfare of the State

ENOCH CALLAWAY, LaGrange

Presentation of the President's Gold Key to the President, Enoch Callaway, LaGrange, by David Henry Poer, Atlanta.

Address

Ernest E. Irons, Chicago, Ill.

President, American Medical Association.

Handling the Emotional Problems of the Cancer Patient.

Jacob E. Finesinger, Baltimore, Maryland.

Department of Psychiatry, University of Maryland School of Medicine.

Medical Services in the Department of Defense.

Richard Lewis Meiling, Washington, D. C.

Director of Medical Services, Department of Defense, United States Military Medicine.

THURSDAY, APRIL 20, 8:30 A. M.

Eastern Standard Time

City Auditorium

The time allotted to each paper, which INCLUDES the showing of slides or moving pictures, is 12 minutes.

1. Trauma.
Peter B. Wright, Augusta.
 2. Horizons of Plastic Surgery.
John R. Lewis, Jr., Atlanta.
 3. The Treatment of Fractures of the Middle Third of the Face.
Frank F. Kanthak, Atlanta.
 4. The Early Signs and Symptoms of Brain Tumors.
Charles E. Dowman, Atlanta.
 5. The Relief of Distressing Pain by Interrupting Nerve Pathways.
Exum Walker, Atlanta.
- To open the discussion of papers 1, 2, 3, 4 and 5:
W. A. Risteen, Augusta.
C. F. Holton, Savannah
- Recess of 15 minutes to visit exhibits.
6. The Use of Antabuse in the Treatment of Alcoholism.
James N. Brawner, Jr., Atlanta.
 7. Hypnosis—Some of its Uses in Psychiatry and General Practice.
Corbett Thigpen, Augusta.
 8. Sudden Death in a Psychiatric Practice.
Joseph D. McElroy, Atlanta.
- To open the discussion of papers 6, 7 and 8:
H. D. Allen, Jr., Milledgeville.
Newdigate M. Owensby, Atlanta.
9. Cortical Adrenal Tumors—Unusual Case.
Ralph H. Chaney, Augusta.
Robert B. Greenblatt, Augusta.
 10. The Common Tumors of the Genito-Urinary Tract Clinical Aspects.
Robert W. McAllister, Macon.
- To open the discussion of papers 9 and 10:
William E. Goodyear, Atlanta.
Charles L. Prince, Savannah.

THURSDAY, APRIL 20, 12:00 NOON

Eastern Standard Time

City Auditorium

MEMORIAL EXERCISES

M. Preston Agee, Augusta

Chairman, Committee on Necrology.

THURSDAY, APRIL 20, 2:30 P. M.

Eastern Standard Time

City Auditorium

The time allotted to each paper, which INCLUDES the showing of slides or moving pictures, is 12 minutes.

1. The Management of Cardiac Arrhythmias.
Bruce Logue, Atlanta.
 2. The Differential Diagnosis and Treatment of the Coronary Diseases.
Paul T. Russell, Albany.
 3. Practical Aspects of Treatment of Dicumarol Poisoning.
David F. James, Atlanta.
 4. Methods and Uses of Cardiopulmonary Function Tests.
Robert F. Ellison, Augusta.
William F. Hamilton, Jr., Augusta.
- To open the discussion of papers 1, 2, 3 and 4:
Arthur M. Knight, Jr., Waycross.
J. A. Redfearn, Albany.
5. Streptomycin Failures in the Treatment of Tuberculosis.
Rufus F. Payne, Rome.
- To open the discussion of paper 5:
H. C. Atkinson, Macon.
Joe S. Cruise, Atlanta.

6. The Treatment of Intractable Dysmenorrhea by Pre-Sacral Sympathectomy.
Albert L. Evans, Atlanta.
 7. Essentials in the Diagnosis and Preoperative Management of Congenital Atresia of the Esophagus, With Esophago-Tracheal Fistula.
Osler A. Abbott, Atlanta.
William A. Hopkins, Atlanta.
 8. Fasciotomy in the Treatment of Gravitational Leg Ulcers.
C. K. Wall, Thomasville.
 9. Lesions of the Shoulder.
Paul L. Rieth, Atlanta.
 10. Melanoma.
Irvin H. Trichner, Atlanta.
Robert L. Brown, Atlanta.
Everett L. Bishop, Atlanta.
- To open the discussion of papers 6, 7, 8, 9 and 10:
Charles H. Richardson, Sr., Macon.
Charles E. Rushin, Atlanta.

FRIDAY, APRIL 21, 9:00 A. M.

Eastern Standard Time

City Auditorium

The time allotted to each paper, which INCLUDES the showing of slides or moving pictures, is 12 minutes.

1. Management of the Ambulant Arthritic Patient.
Arthur M. Pruce, Atlanta.
2. Headaches.
Ellison R. Cook, III, Savannah.
3. Hemangioma of the Vertebrae as a Cause of Gastro-Intestinal Symptoms—Report of Case.
Spalding Schroder, Atlanta.
To open the discussion of papers 1, 2 and 3:
W. W. Chrisman, Macon.
J. W. Chambers, LaGrange.
4. The Management of Ureteral Obstruction in Children.
Peter L. Scardino, Savannah.
5. Bladder Dysfunction Due to Congenital Causes.
J. Robert Rinker, Augusta.
To open the discussion of papers 4 and 5:
W. L. Bazemore, Macon.
Rudolph Bell, Thomasville.
6. The Use of Radioactive Iodine in the Diagnosis and Treatment of Diseases of the Thyroid.
Charles M. Huguley, Jr., Atlanta.
7. The Use of Folic Acid Antagonists in the Treatment of Acute and Subacute Leukemia.
Milton H. Freedman, Atlanta.
8. Pulmonary Sarcoidosis.
James J. Clark, Atlanta.
Robert M. Tankesley, Atlanta.
9. Recent Advances in the Treatment of Early Syphilis.
Rudolph W. Jones, Jr., Atlanta.
To open the discussion of papers 6, 7, 8 and 9:
W. Holloway Bush, Macon.
Henry Schmidt, Augusta.

ANNOUNCEMENT OF ELECTION OF OFFICERS AND DELEGATES TO A. M. A.

President-Elect
First Vice-President
Second Vice-President
Delegates to the A. M. A.
Councilors:
Fifth District
Sixth District
Seventh District
Eighth District
Selection of meeting place for 1951.

CONSTITUTION AND BY-LAWS

Chapter II, Section 2. No papers or addresses before the Association, except those of the President and invited essayists, shall occupy more than fifteen minutes in their delivery; and no member shall speak longer than five minutes, nor more than once on any subject, provided that each essayist shall have five minutes in

which to close the discussion of his paper.

Chapter VIII, Section 1. The deliberations of this Association shall be governed by parliamentary usage as contained in Robert's Rules of Order, when not in conflict with this Constitution and By-Laws.

Chapter VIII, Section 2. All papers read before the Association shall become its property. Each paper shall be deposited with the Secretary when read, and if this is not done it shall not be published.

No miscellaneous or business matters will be discussed before the scientific meetings, but will be referred to the House of Delegates.

We are instructed by the President to announce to all essayists that the sessions of the Scientific Program of the Association will begin on time, and that the above regulations of the By-Laws in reference to the program will be strictly enforced.

COMMITTEE ON SCIENTIFIC WORK

Carter Smith, Chairman	Atlanta
W. C. McGeary	Madison
Richard Torpin	Augusta
Edgar D. Shanks	Atlanta

IN MEMORIAM

Adair, Robert Edgar, Cartersville, June 17, 1949, aged 83.
Anthony, Joseph Render, Griffin, February 15, 1949, aged 66.
Atwood, George Elliott, Waycross, September 30, 1949, aged 72.
Ayers, Amos Jefferson, Atlanta, September 18, 1949, aged 60.
Baker, James Oscar, Savannah, December 6, 1949, aged 82.
Bowen, John Hiram, Cobbtown, December 4, 1949, aged 83.
Bowling, Jackson Murrell, Forest Park, September 6, 1949, aged 42.
Brannen, Clemmie C., Moultrie, November 16, 1949, aged 61.
Brown, Barton, Savannah, January 28, 1950, aged 83.
Camp, Joseph Abner, Roberta, October 22, 1949, aged 72.
Carter, George B., Shellman, October 4, 1949, aged 88.
Collins, George Harwood, Lumber City, June 12, 1949, aged 31.
Colvin, Jackson T., Jesup, December 8, 1949, aged 69.
Connor, James Clarence, Cave Spring, August 24, 1949, aged 58.
Cooper, John Jesse, Cedartown, August 5, 1949, aged 82.
Cox, Clarence Goolsby, Milledgeville, December 2, 1949, aged 62.
Davis, Claude Lester, Hinesville, May 21, 1949, aged 58.
Dellinger, Arthur Herman, Rome, August 26, 1949, aged 61.
Ellis, Samuel B., Pitts, October 8, 1949, aged 64.
Garrard, James Isaac, Milledgeville, June 12, 1949, aged 79.
Green, Samuel, Atlanta, Augusta 18, 1949, aged 60.
Griffith, Daniel Henry, Atlanta, June 2, 1949, aged 65.
Hafford, Wilbur Claire, Waycross, February 26, 1950, aged 63.
Harris, Raymond, Ocilla, June 1, 1949, aged 37.
Holmes, John Parham, Macon, November 20, 1949, aged 64.
Jackson, John Brady, Clarkesville, July 3, 1949, aged 69.
Johnson, James Clarence, Atlanta, November 7, 1949, aged 84.
Kerr, George S., Dalton, November 24, 1949, aged 42.
Lake, William Fay, Atlanta, December 20, 1949, aged 61.
McAllister, James Arren, Atlanta, February 16, 1950, aged 58.
McCullough, Kenneth, Waycross, October 28, 1949, aged 58.
Murray, James, Atlanta, November 3, 1949, aged 72.
Parham, John Bernard, Tallapoosa, October 2, 1949, aged 59.

- Pettit, John Thomas, Canton, August 10, 1949, aged 69.
 Prince, Ephraim LaFayette, Morganton, September 2, 1949, aged 82.
 Puckett, A. Madison, Atlanta, November 27, 1949, aged 59.
 Rozar, Allen Robert, Macon, December 11, 1949, aged 62.
 Schwall, Edward Walker, Gracewood, September 27, 1949, aged 45.
 Scofield, Irving F., Tate, October 18, 1949, aged 70.
 Sewell, James A., Atlanta, September 11, 1949, aged 80.
 Shaw, Lowndes Walton, Savannah, January 26, 1950, aged 58.
 Steed, John Henry, Dalton, August 18, 1949, aged 73.
 Story, Warren L., Ashburn, September 24, 1949, aged 84.
 Tankersley, James Simpson, Ellijay, February 11, 1950, aged 90.
 Tootle, G. W., Glennville, August 15, 1949, aged 79.
 Turner, William A., Newnan, January 21, 1950, aged 75.
 Wisdom, Wilbur David, Atlanta, July 25, 1949, aged 30.
 Young, Seaborn E., Midland, February 11, 1950, aged 83.

SCIENTIFIC EXHIBITS

City Auditorium

1. *Activities and Training Program, Department of Ophthalmology and Otolaryngology*—Lawson VA Hospital in conjunction with Emory University School of Medicine, T. W. O. Meissner, A. Paul Keller, Augustus Gafford, John Howard, F. Phinizy Calhoun, Jr., Nathan I. Gershon, and Lester A. Brown, Atlanta.
2. *The Colcher-Sussman Technic of X-Ray Pelvimetry and Cephalometry*—Eugene L. Griffin, and J. Lon King, Atlanta.
3. *Teamwork in Cancer Diagnosis*—Georgia Division, American Cancer Society.
4. *The Treatment of Flat Feet in Children*—J. Hiram Kite, and W. W. Lovell, Atlanta.
5. *Angiograph in Cerebral Vascular Lesions*—Edgar F. Fincher, Homer S. Swanson, and William C. Warren, Department of Surgery, Neurosurgical Section, Emory University School of Medicine, Atlanta.
6. *Paget's Disease*—Peter B. Wright, and Lane H. Allen, Department of Orthopedic Surgery and Department of Anatomy, Medical College of Georgia, Augusta.
7. *Perineal Prostatectomy with Primary Closure of the Prostatic Capsule*—James H. Semans, Atlanta.
8. *Oxycephaly*—Morgan B. Raiford, Emory University Eye Bank, from the Clay Memorial Eye Clinic and the Grady Memorial Hospital, Atlanta.
9. *Gallbladder Roentgenology*—Ted F. Leigh, and Edgar A. Thompson, Department of Roentgenology, Emory University School of Medicine, Atlanta.
10. *Mental Hygiene—A Preventive Program*—Georgia Department of Public Health; Divisions of Maternal and Child Health and Mental Hygiene, Atlanta.
11. *Illustrative Literature and Official Academy Reports*—American Academy of General Practice, Georgia Division, J. B. Kay, Byron.
12. *Therapeutic Interviews with Psychogenic Patients*—Carl Whitaker, Department of Psychosomatic Medicine, Emory University School of Medicine, Atlanta.
13. *Occupational Disease in Differential Diagnosis*—Georgia Department of Public Health, Division of Industrial Hygiene, in cooperation with the United States Public Health Service, Atlanta.
14. *Cineradiography*—H. S. Weens, J. V. Warren, and J. L. Cannon, Department of Radiology and Department of Physiology, Emory University School of Medicine, Atlanta.
15. *X-Ray Investigation of Renal Tumors*—H. M. Olnick, J. V. Rogers, Jr., and H. S. Weens, Department of Radiology, Emory University School of Medicine, Atlanta.

16. *Replacement Transfusion*—Joseph Patterson, Crawford W. Long Memorial Hospital, Atlanta.
17. *Carcinoma of the Thyroid*—David Henry Poer, Atlanta.
18. *New Hospitals in Georgia Built Under the Hospital Construction Program*—Georgia Department of Public Health, Division of Hospital Services and Regional Office, United States Public Health Service, Atlanta.
19. *Some Conditions Exhibiting Periosteal Reaction in Children*—L. P. Holmes, S. W. Brown, W. F. Hamilton, Jr., D. C. Burns, Jr., and Neal F. Yeomans, Department of Roentgenology, Medical College of Georgia, Augusta.
20. *Endocrine Laboratory Procedures*—R. B. Greenblatt, Sarah Clark, and Nelson Brown, Department of Endocrinology, Medical College of Georgia, Augusta.
21. *Physical Medicine in Child Rehabilitation*—(This exhibit will show children getting actual treatment by physical therapists every hour on the hour and equipment will be demonstrated), Harriet E. Gillette, and Fred Hodgson, Cerebral Palsy Society of Georgia, Crippled Children's Department of Public Welfare, and Aidmore, Atlanta.
22. *Your Blood Is Life*—National Blood Program, American Red Cross.
23. *What the General Practitioner Should Know About Tuberculosis*—United States Public Health Service, Communicable Disease Center, Atlanta.
24. *The Educational Aspects of Nutrition Service in Outpatient Medicine*—Estelle P. Boynton and Eleanor Thompson, Veterans Administration Regional Office, Atlanta.
25. *Mycosis Fungoides and Other Skin Lesions*—J. M. Bazemore, and E. C. Hopkins, Department of Dermatology, Medical College of Georgia, Augusta.
26. *Curable Forms of Heart Disease*—Georgia Heart Association, Inc.

TECHNICAL EXHIBITS

City Auditorium

2. Lullaby Diaper Service
Mr. Earl Alcorn
582 Piedmont Avenue, N. E., Atlanta, Ga.
5. The Nestle Company, Inc.
155 East 44th Street, New York 17, N. Y.
6. Sharp & Dohme, Inc.
Philadelphia 1, Pa.
7. The Doho Chemical Corporation
100 Varick Street, New York 13, N. Y.
8. Brayten Pharmaceutical Company
3802 St. Elmo Avenue, Chattanooga 9, Tenn.
Mr. Ben Perryman, P. O. Box 242, Atlanta, Ga.
9. Parke, Davis & Company
Detroit 32, Mich.
Mr. C. O. Church, 232 Courtland St., N. E., Atlanta, Ga.
11. J. A. Majors Company
1301 Tulane Avenue, New Orleans 12, La.
14. Southern Spring Bed Company
290 Hunter Street, S. E., Atlanta, Ga.
15. The Wm. S. Merrell Company
Lockland Station, Cincinnati 15, O.
16. General X-Ray Corporation
1383 Spring Street, N. W., Atlanta, Ga.
17. U. S. Vitamin Corporation
250 East 43rd Street, New York 17, N. Y.
18. A. H. Robbins Company, Inc.
1322-24 West Broad Street, Richmond 20, Va.
19. Eli Lilly and Company
Indianapolis 6, Ind.
20. Estes Surgical Supply Company
56 Auburn Avenue, N. E., Atlanta, Ga.
21. C. B. Fleet Company, Inc.
921-27 Commerce Street, Lynchburg, Va.
22. American Surgical Supply Company
489 Peachtree Street, N. E., Atlanta, Ga.
23. Philip Morris & Company, Ltd., Inc.
100 Park Avenue, New York 17, N. Y.

24. Surgical Selling Company
139 Forrest Avenue, N. E., Atlanta, Ga.
29. Hoffman-La Roche Inc.
Roche Park, Nutley 10, N. J.
30. Marks & Marks, Inc.
412-16 Sixth Street, Augusta, Ga.
31. The Borden Company
350 Madison Avenue, New York 17, N. Y.
33. Spencer Incorporated
New Haven 7, Conn.
34. The Liebel-Flarsheim Company
Cincinnati 2, O.
35. VanPelt and Brown, Inc.
Richmond, Va.
36. Mead Johnson & Company
Evansville 21, Ind.
Mr. J. H. Gilmore, 1672 Emory Road, N. E.,
Atlanta, Ga.
37. Picker X-Ray Corporation
300 Fourth Avenue, New York 10, N. Y.
38. Winthrop-Stearns Inc.
170 Varick Street, New York 13, N. Y.
39. Wm. P. Poythress & Company, Inc.
Richmond, Va.
40. Lederle Laboratories Division
American Cyanamid Company
30 Rockefeller Plaza, New York 20, N. Y.
41. Ciba Pharmaceutical Products, Inc.
556 Morris Avenue, Summit, N. J.
42. E. R. Squibb & Sons
745 Fifth Avenue, New York 22, N. Y.
43. Carnation Company
5045 Wilshire Boulevard, Los Angeles 36, Calif.

SCIENTIFIC PRESENTATIONS

Scientific presentations have been omitted from this number of *The Journal* in order to present to its readers certain facts regarding the early history of the MEDICAL ASSOCIATION OF GEORGIA. Present and future medical historians must therefore refer to the contents of the journals of 1950, as a whole, to ascertain the quality of the scientific medical work of Georgia physicians of this period.—Ed.

CONSTITUTION AND BY-LAWS OF THE MEDICAL ASSOCIATION OF GEORGIA, 1950

Constitution

ARTICLE I.—NAME OF THE ASSOCIATION

The name and title of this organization shall be The Medical Association of Georgia.

ARTICLE II.—PURPOSES OF THE ASSOCIATION

The purposes of this Association shall be to federate and bring into one component organization the entire medical profession of the State of Georgia; to extend medical knowledge and advance medical science; to elevate the standard of medical education and to secure the enactment and enforcement of just medical laws; to promote friendly intercourse among physicians; to guard and foster the material interests of its members and to protect them against imposition; and to enlighten and direct public opinion in regard to the great problems of state and medicine, so that the profession shall become more capable and honorable within itself, and more useful to the public, in the prevention and cure of disease, and in prolonging and adding comfort to life.

ARTICLE III.—COMPONENT SOCIETIES

Component societies shall consist of those county societies which hold charters from this Association.

ARTICLE IV.—COMPOSITION OF THE ASSOCIATION

Section 1. This Association shall consist of members and delegates.

Sec. 2. Members: The members of this Association shall be the members of the component county medical societies to which only white physicians shall be eligible.

Sec. 3. Delegates: Delegates shall be those members who are elected in accordance with this Constitution and By-Laws to represent their respective component societies in the House of Delegates of this Association.

ARTICLE V.—HOUSE OF DELEGATES

The House of Delegates shall be the legislative body of the Association, and shall consist of: (1) delegates elected by the component county societies; (2) the officers of the Association enumerated in Section 1 of Article IX of the Constitution; (3) ex-presidents and delegates to the American Medical Association.

ARTICLE VI.—COUNCIL

The Council shall be the Board of Trustees and Finance Committee of the Association. The Council shall have full authority and power of the House of Delegates to be called into session as provided in the Constitution and By-Laws.

It shall consist of the Councilors, the President, the President-Elect and the Secretary-Treasurer of the Association. Five of its members shall constitute a quorum.

ARTICLE VII.—SESSIONS AND MEETINGS

Section 1. The annual session shall take place on the second Wednesday in May at such place as shall be designated by the Association, provided that in case of conflict with the annual session of the American Medical Association or on petition of the county society of the host city made at least six months before the fixed dates for the annual session, the Council may change the dates by publishing a notice in the JOURNAL OF THE MEDICAL ASSOCIATION OF GEORGIA three months before the session.

Sec. 2. Special meetings of either the Association or the House of Delegates may be called by a two-thirds vote of the Council, or upon the petition of twenty delegates.

ARTICLE VIII.—SECTIONS AND DISTRICT SOCIETIES

Section 1. The House of Delegates may provide for a division of the scientific work of the Association into appropriate sections, and for the organization of such Councilor district societies as will promote the best interests of the profession, such societies to be composed exclusively of members of component county societies.

ARTICLE IX.—OFFICERS

Section 1. The officers of this Association shall be a President, President-Elect, two Vice-Presidents, a Secretary-Treasurer, a Parliamentarian, and one Councilor for each congressional district in the State.

Sec. 2. The officers, except the Secretary-Treasurer, Parliamentarian and Councilors, shall be elected annually, provided that after the annual meeting of 1928 a President-Elect and not a President shall be elected annually. The President-Elect shall assume his office as President immediately after the next annual meeting

following his election. The terms of the Councilors shall be for three years, as may be arranged, viz: the Councilor for the first, second, third and fourth districts for three years; those for the fifth, sixth, seventh, and eighth districts for one year; those for the ninth and tenth districts for two years. The Secretary-Treasurer shall be elected for a term of five years, and the Parliamentarian for a term of three years. All these officers shall serve until their successors are elected and installed (1933).

Sec. 3. The officers of this Association shall be elected by ballot. The nomination for office shall be made orally, on the first day of the annual session immediately after the response to the address of welcome and just before the first paper of the scientific program. The nominating speech shall not exceed two minutes.

The Councilors shall be nominated at the same time by their respective district societies, but if no nomination from a district society is brought before the Association, the nomination for Councilor may be presented from the floor.

A locked ballot box shall be set up by 12:00 noon of the first day of the annual scientific session, at the registration booth. Official ballots, with a blank space for writing in the name of the candidate for each office, shall be printed and kept in the custody of the Secretary-Treasurer, who shall check the eligibility of each voter before handing him an unnumbered ballot. Votes shall be deposited in the locked ballot box.

Voting shall take place during the hours the scientific program is in session, from 12:00 noon on the first day of the annual session until 10:30 a.m. of the third day of the annual session. A committee, appointed by the President, shall count the votes in the ballot box at 10:30 a.m. of the last day of the annual session and report their findings to the Association. The candidate receiving the highest number of votes shall be declared elected.

Delegates to the American Medical Association shall be elected at the same time and in the same manner.

ARTICLE X.—FUNDS AND EXPENSES

Funds shall be raised by an equal per capita assessment on each component society. The amount of the assessment shall not exceed the sum of \$10.00 per capita per annum. Funds may be appropriated by the House of Delegates to defray the expenses of the Association, for publications, and for such other purposes as will promote the welfare of the profession. All resolutions appropriating funds must be approved by the Finance Committee before action is taken thereon.

ARTICLE XI.—RATIFICATION

The House of Delegates shall submit all questions before it to the Association for ratification.

ARTICLE XII.—THE SEAL

The Association shall have a common seal, with power to break, change or renew the same at pleasure.

ARTICLE XIII.—AMENDMENTS

Any amendment that may be offered to the Constitution shall lie over until the next annual session; and for its adoption at such session shall require a two-thirds vote of all present and voting.

By-Laws

CHAPTER I.—MEMBERSHIP

Section 1. The name of a physician on the properly certified roster of members of a component society, which has paid its annual assessment, shall be *prima facie* evidence of membership in this Association.

Sec. 2. Any person who is under sentence of suspension or expulsion from a component society or whose name has been dropped from its roll of members, shall not be entitled to any of the rights or benefits of this Association, nor shall he be permitted to take part in any of its proceedings until he has been relieved of such disability.

Sec. 3. Each member in attendance at the annual session shall enter his name on the registration book, indicating the component society of which he is a member. When his right to membership has been verified by reference to the roster of his society, he shall receive a badge which shall be evidence of his right to all the privileges of membership at that session. No member shall take part in any of the proceedings of an annual session until he has complied with the provisions of this section.

Sec. 4. Special membership. In addition to *Regular* members, component societies may elect to membership in their organizations, for membership in this Association, the following groups of members:

(a) *Honorary members.* Any member for old age, length of service, or other good reasons, may be elected an honorary member of his county medical society, for membership in this Association. Such member shall, after election, be issued a certificate of honorary membership in this Association.

Non-resident physicians and resident or non-resident lay persons who have distinguished themselves in fields of endeavor devoted to the advancement of human welfare, may be nominated by county medical societies, or by the House of Delegates of this Association, for honorary membership in this Association. A county medical society shall not nominate for this class of membership more than one person each year. The name of such person shall be sent to the Secretary-Treasurer of this Association thirty days in advance of the annual session. Such person shall be issued an appropriate certificate of honorary membership in this Association if, and when, he is elected to honorary membership by this Association.

(b) *Associate members.* Eligible to this classification are (1) those regular members of component societies to whom the payment of dues would be an undue hardship; (2) interns, and (3) commissioned medical officers (see Chapter VII, Sec. 5 of these By-Laws) of the United States Army, the United States Navy and the United States Public Health Service while engaged actively in their respective services or if they have been retired on account of age or physical disability, or after long and honorable service, under the provisions of an Act of Congress.

(c) Honorary and Associate members shall not be subject to the payment of dues to the State Association. They shall enjoy the privileges of full participation in the scientific, social and educational activities of this

Association. They shall not vote nor hold office and do not receive the JOURNAL or benefits of Medical Defense.

Sec. 5. Any physician applying for membership in a component medical society of this Association, who has previously practiced in a county in which affiliation with a component society is provided, and who moves to another county without having affiliated with the medical society in the jurisdiction of previous residence, before he is admitted to membership, the cause of his lack of affiliation in the society of his previous residence shall be ascertained.

CHAPTER II.—GENERAL MEETINGS

Section 1. All registered members may attend and participate in the proceedings and discussions of the general meetings. Visitors duly accredited to represent the associations of other states, or of the District of Columbia, not exceeding two in number for each organization, may attend upon, and participate in, the discussion of the general meeting, but shall not have a vote. Such delegates may read papers upon invitation of the Committee on Scientific Work. The general meetings shall be presided over by the President or by one of the Vice-Presidents.

Sec. 2. No papers or addresses before the Association, except those of the President and invited essayists, shall occupy more than fifteen minutes in their delivery; and no member shall speak longer than five minutes, nor more than once on any subject, provided that each essayist shall have five minutes in which to close the discussion of his paper.

Sec. 3. Entertainment. Any social entertainment which may be given by this Association shall be confined to the evening of the second day.

Sec. 4. *Guests.* Any physician not a resident of this State but a member of his state association, or any distinguished scientist not a physician, may be counted a guest during any annual session on invitation of the President, and shall be accorded the privilege of participating in the scientific work of that session.

CHAPTER III.—HOUSE OF DELEGATES

Section 1. The House of Delegates shall meet on the day preceding the first day of the annual session, the time to be fixed by the Committee on Scientific Work. It may adjourn from time to time as may be necessary to complete its business; provided that its hours shall conflict as little as possible with the general meetings. The order of business shall be arranged as a separate section of the program.

Sec. 2. Each component county society shall be entitled to send to the House of Delegates each year one delegate for every fifty members, and one for each fraction thereof, but each component society which has made its annual report and paid its assessment as provided in this Constitution and By-Laws shall be entitled to one delegate. Should the regular delegates from any county not be present at the meeting, the President shall appoint a substitute from that county to act.

Sec. 3. Twenty delegates present shall constitute a quorum.

Sec. 4. It shall, through its officers, council and otherwise, give diligent attention to and foster the scientific work and spirit of the Association, and shall

constantly study and strive to make each annual session a stepping-stone to future ones of higher interest.

Sec. 5. It shall consider and advise as to the material interest of the profession, and of the public in those important matters wherein it is dependent on the profession, and shall use its influence to secure and enforce all proper medical and public health legislation, and to diffuse popular information in relation thereto.

Sec. 6. It shall make careful inquiry into the condition of the profession of each county in the State, and shall have authority to adopt such methods as may be deemed most efficient for building up and increasing the interest of such county societies as already exist, and for organizing the profession in counties where societies do not exist. It shall especially and systematically endeavor to promote friendly intercourse among physicians of the same locality, and shall continue these efforts until, if possible, every physician in every county of the State has been brought under medical society influence.

Sec. 7. It shall encourage post-graduate and research work as well as home study, and shall endeavor to have the results utilized, and intelligently discussed in the county societies.

Sec. 8. It shall divide the State into councilor districts, one for each congressional district, and when the best interests of the Association and profession will be promoted thereby, organize in each a district medical society, and all members of component county societies and no others shall be members in such district societies.

Sec. 9. It shall have authority to appoint committees for special purposes from among members of the Association who are not members of the House of Delegates. Such committees shall report to the House of Delegates and may be present and participate in the debate thereon.

CHAPTER IV.—DUTIES OF OFFICERS

Section 1. The President shall preside at all meetings of the Association and of the House of Delegates; shall appoint all committees not otherwise provided for, and shall perform such other duties as custom and parliamentary usage may require. He shall be the real head of the profession of the State during his term of office, and as far as practicable, shall visit, by appointment, the various sections of the State and assist the Councilors in building up the county societies, and in making their work more practical and useful.

In order to give him a better opportunity of becoming more fully acquainted with his duties and with the needs of the Association, the President shall be elected one year prior to taking office. During this time he shall be known as President-Elect and shall be ex-officio member of standing committees, and shall make recommendations at the next annual session.

Sec. 2. The Vice-Presidents shall assist the President in the discharge of his duties. In the event of the President's death, resignation or removal, the Vice-Presidents, in their order, shall succeed him.

Sec. 3. The Secretary-Treasurer shall give bond in the sum of One Thousand Dollars. He shall demand

and receive all funds due the Association, together with the bequests and donations.

Sec. 4. The Secretary-Treasurer shall attend the general meetings of the Association and the meetings of the House of Delegates, and shall keep the minutes of their respective proceedings in separate record books. He shall be ex-officio Secretary of the Council. He shall be custodian of all record-books and papers belonging to the Association. He shall provide for the registration of the members, delegates and accredited visitors at the annual session. He shall, with the cooperation of the secretaries of the component societies, keep a card-index register of all the legal practitioners of the State by counties, noting on each his status in relation to his county society, and on request transmit a copy of this list to the American Medical Association. He shall aid the Councilors in the organization and improvement of the county societies in the extension of the power and usefulness of this Association. He shall conduct the official correspondence, notifying members of meetings, officers of their election, and committees of their appointments and duties. He shall employ such assistants as may be ordered by the House of Delegates with the approval of the Association, and shall make an annual report to the Association. He shall supply each component society with the necessary blanks for making their annual reports; shall keep an account with the component societies, charging against each society its assessment and collect the same. Acting with the Committee on Scientific Work, he shall prepare and issue all programs. The amount of his salary shall be fixed by the Association. He shall be editor of the JOURNAL OF THE MEDICAL ASSOCIATION OF GEORGIA. He shall employ such assistants as may be ordered by the Council or the House of Delegates. He shall annually make a report of his doings to the House of Delegates.

He shall furnish a balance sheet at each annual meeting for the past fiscal year to be published in the JOURNAL. This shall consist of an itemized statement of all financial transactions of the past year, all accounts made, money received and from whom, all moneys disbursed, to whom, and for what purpose, with vouchers attached. A fiscal year includes the period of time between the first day of May and the last day of April.

CHAPTER V.—COUNCIL

Section 1. The Council shall meet on the day preceding the annual session and daily during the session, and at such other times as necessity may require, subject to the approval of the President. It shall meet on the last day of the annual session of the Association to organize and outline work for the ensuing year. It shall elect a chairman and clerk, who, in the absence of the Secretary of the Association, shall keep a record of its proceedings. It shall, through its chairman, make an annual report to the House of Delegates. It shall be the business body of the Association and attend to the business of the Association in the interim between meetings.

Sec. 2. Each Councilor shall be organizer and peace-maker for his district. He shall visit each county in his district at least once a year for the purpose of organizing component societies where none exist, for inquiring into

the conditions of the profession, and for improving and increasing the zeal of the county societies and their members. He shall make an annual report of his work and of the condition of the profession of each county in his district at the annual session of the House of Delegates. The necessary traveling expenses incurred by such Councilor in the line of the duties herein imposed may be allowed by the House of Delegates on a properly itemized statement, but this shall not be considered to include his expense in attending the annual session of the Association. Each Councilor may appoint a Vice-Councilor to assist him in the performance of his duties in his district.

Sec. 3. The Council shall be the board of censors of the Association. It shall consider all questions involving the right and standing of members, whether in relation to the members, to the component societies, or to this Association. All questions of an ethical nature brought before the House of Delegates or the general meeting shall be referred to the Council without discussion. It shall hear and decide all questions of discipline affecting the conduct of members of a component society, on which an appeal is taken from the decision of an individual Councilor, or to which attention has been called by the Councilor or interested members. It shall hear and decide all questions affecting unethical conduct on the part of any member of any annual session, and its decision in all such matters shall be final when ratified by the Association.

Sec. 4. In sparsely settled sections it shall have authority to organize the physicians of two or more counties into societies, to be suitably designated so as to distinguish them from district societies, and the societies, when organized and chartered, shall be entitled to all rights and privileges provided for component societies until such counties shall be organized separately.

Sec. 5. The Council shall provide for and superintend the publication and distribution of all proceedings, transactions and memoirs of the Association, and shall have authority to appoint such assistants to the editor as it deems necessary. It shall manage and conduct the JOURNAL OF THE MEDICAL ASSOCIATION OF GEORGIA, which is the organ of the Association, and all money paid into the treasury as dues shall be received as subscriptions to the JOURNAL.

All money received by the Council and its agents, resulting from the discharge of the duties assigned to them, must be paid to the Secretary-Treasurer of the Association. As the Finance Committee it shall annually audit the accounts of the Secretary-Treasurer and other agents of this Association, and present a statement of the same in its annual report to the House of Delegates, which report shall also specify the character and cost of all the publications of the Association during the year, and the amount of all other property belonging to the Association under its control, with such suggestions as it may deem necessary. In the event of a vacancy in the office of the Secretary-Treasurer, the Council shall fill the vacancy until the next annual election.

Sec. 6. All reports on scientific subjects and all scientific discussions and papers heard before the Asso-

ciation, shall be referred to the JOURNAL OF THE MEDICAL ASSOCIATION OF GEORGIA for publication. The editor, with the consent of the Councilor for the district in which he resides, may curtail or abstract papers or discussions, and the Council may return any paper to its author which it may consider not suitable for publication.

Sec. 7. All commercial exhibits during the annual sessions shall be within the control and direction of the Council.

Sec. 8. In the absence of a Councilor and Vice-Councilor the President is empowered to appoint a representative from the district as acting Councilor, who shall have full rights and powers of a Councilor.

Sec. 9. Each Councilor shall render at every session a written report of each county in his district.

Sec. 10. Any member of the Council who fails to attend two regular successive sessions of the Council, or whose district does not show evidence of the performance of his duties during the year, unless he renders an acceptable excuse to the Council, is subject to have his position declared vacant by the President and a successor appointed by the President.

CHAPTER VI.—COMMITTEES

Section 1. The standing committees shall be as follows:

A Committee on Scientific Work.

A Committee on Public Policy and Legislation.

A Committee on Arrangements.

A Committee on Medical Defense, and such other committees as may be necessary.

Sec. 2. The Committee on Scientific Work shall consist of four members, one of whom shall be the Secretary-Treasurer. The other three members shall be appointed for terms of one, two, and three years, respectively. The vacancy which will occur each year by the expiration of the term of one member shall be filled by the President with an appointment of three years. The member who has the shortest time to serve shall be chairman. The committee shall determine the character and scope of the scientific proceedings of the Association for each session. Thirty days previous to each annual session it shall prepare and issue a program announcing the order in which papers, discussions and other business shall be presented.

This By-Law shall not prohibit the Committee on Scientific Work from inviting not more than two distinguished members of the national organization to deliver addresses or read papers at any annual meeting.

Sec. 3. The Committee on Public Policy and Legislation shall consist of three members and the President and Secretary, the Commissioner of Health of the State of Georgia, and a sub-committee of three members from each Councilor District appointed by the chairman when needed. It shall represent the Association in securing and enforcing legislation in the interests of public health and of scientific medicine. It shall keep in touch with professional and public opinion, shall endeavor to shape legislation so as to secure the best results for the whole people, and shall strive to organize professional influence so as to promote the general good of the community in local and national affairs and elections.

Sec. 4. The Committee on Arrangements shall be appointed by the component society in which the annual session is to be held. It shall provide suitable accommodations for the meeting places of the Association and of the House of Delegates and their respective committees, and shall have general charge of all arrangements. Its chairman shall report an outline of the arrangements to the Secretary-Treasurer for publication in the program, and shall make additional announcements during the session as occasion may require.

Sec. 5. The Committee on Medical Defense shall consist of five members, of whom the Chairman of the Council and the Secretary-Treasurer of the Association shall be members. The other members, one of whom shall act as chairman of the committee, shall be elected by the Council for a period of five years. Those elected at this meeting (April 19, 1916), shall serve one, three and five years, respectively.

It shall be the duty of the Committee on Medical Defense to investigate and defend all damage suits against the Medical Association of Georgia; to investigate all claims of civil malpractice made against its members, to take full charge of such cases, which after investigation they decide to be proper cases for defense; to defend all such cases in the courts of last resort, to furnish General Counsel and pay court cost usual to such litigation, and reasonable fees for local attorneys as shall be arranged by General Counsel. Provided that any member who has indemnity insurance shall have such insurance bear its portion of the expense. However, they shall not pay, or obligate the Medical Association of Georgia to pay any judgment rendered against any member upon the final determination of any case. They shall be empowered to contract with such agents or attorneys as they may deem necessary for the proper carrying out of this By-Law.

The assistance for defense, as herein provided, shall be available only to members of the Medical Association of Georgia in good standing. Any member who has not paid his annual dues by April 1st shall not be considered in good standing in the application of this By-Law.

Any member or members of the Association threatened with suit for civil malpractice shall immediately communicate with the Secretary of the Association and shall give full and complete information in reference to all the circumstances alleged in the complaint. The Secretary shall proceed immediately to investigate the circumstances reported and shall advise with the attorneys or agents employed by the committee for this purpose. The member sued, or threatened with suit, shall be consulted and shall have the complete confidence of the committee in all transactions connected with the investigation in question. The committee shall have the authority to require of a constituent society or the president thereof, the appointment of a committee of investigation in any such case, and it may direct the committee so appointed to report to the Committee on Medical Defense and not to the society from which it was appointed.

The Committee on Medical Defense may also, at its discretion, arrange to prosecute illegal practitioners in

the State of Georgia and assist in the enforcement of the Medical Practice Act of this State.

CHAPTER VII.—COUNTY SOCIETIES

Section 1. All county societies now in affiliation with this Association, or those which may hereafter be organized in the State, which have adopted principles of organization not in conflict with this Constitution and By-Laws, shall, on application, receive a charter from and become a component part of this Association.

Sec. 2. As rapidly as can be done after the adoption of this Constitution and By-Laws, a medical society shall be organized in every county in the State in which no component society exists, and charter shall be issued thereto.

Sec. 3. Charters shall be issued only on approval of the Council, and shall be signed by the President and Secretary of this Association. The Association shall have authority to revoke the charter of any component society whose actions are in conflict with the letter or spirit of this Constitution and By-Laws.

Sec. 4. Only one component medical society shall be chartered in any county.

Sec. 5. Each county society shall judge of the qualifications of its own members, but as such societies are the only portals of this Association, every legally registered white physician who does not practice or claim to practice, nor lend his support to any exclusive system of medicine, shall be eligible to membership. Physicians who have been legally registered in other states or who have been licensed by the National Board of Medical Examiners, or who are employed as teachers in the medical schools, or are in the service of the State, a county, a municipality, or the United States Government other than the regular medical corps of the United States Army, the United States Navy and of the United States Public Health Service, may be accepted for membership in county medical societies, for membership in this Association, provided they meet the requirements of regular membership. Before a charter is issued to any county medical society, full and ample notice and opportunity shall be given to every such physician in the county to become a member.

Sec. 6. No matter what the unethical conduct or discipline of the members of the county society may be, both plaintiff and defendant shall have the right to appeal to the Council, whose decision shall be final when ratified by the Association.

Sec. 7. In hearing appeals the Council may admit oral or written evidence, as in its judgment will best and most fairly present the facts, but in case of every appeal, both as a board and as individual Councilors in district and county work, efforts at conciliation and compromise shall precede all such hearings.

Sec. 8. When a member in good standing in a component county society moves to another county in this State, he shall be given a written certificate of these facts by the secretary of his society, without cost, for transmission to the secretary of the society in the county to which he moves. Pending his acceptance or rejection by the society in the county to which he moves, such member shall be considered to be in good standing in the county society from which he was certified and in

the Medical Association of Georgia to the end of the period for which his dues have been paid.

Sec. 9. A physician living on or near a county line may hold his membership in that county most convenient for him to attend, on permission of the component society in which jurisdiction he resides.

10. Each component society shall have general direction of the affairs of the profession in its county, and its influence shall be constantly exerted for bettering the scientific, moral and material conditions of every physician in the county; and systematic efforts shall be made by each member and by the society as a whole, to increase the membership until it embraces every qualified physician in the county.

Sec. 11. At some meeting in advance of the annual session of this Association each county society shall elect a delegate or delegates to represent it in the House of Delegates of this Association, in the proportion of one delegate to each fifty members, or fraction thereof, and the Secretary of the society shall send a list of such delegates to the Secretary of this Association at least ten days before the annual session.

Sec. 12. The Secretary of each component society shall keep a roster of its members, and of the non-affiliated registered physicians of the county, in which shall be shown the full name, address, college and date of graduation, date of license to practice in this State, and such other information as may be deemed necessary. In keeping such roster the Secretary shall note any changes in the personnel of the profession by death, or by removal to or from the county, and in making his annual report he shall be certain to account for every physician who has lived in the county during the year.

Sec. 13. The Secretary of each component society shall forward its assessment, together with its roster of officers and members, list of delegates, and list of non-affiliated physicians of the county, to the Secretary of this Association each year thirty days before the annual session.

Sec. 14. Any county society which fails to pay its assessment, or make the report required on or before April 1 of each year, shall be held as suspended, and none of its members or delegates shall be permitted to participate in any of the business or proceedings of the Association, or of the House of Delegates, until such requirement has been met.

Sec. 15. The Secretary of each county society shall report to the JOURNAL OF THE MEDICAL ASSOCIATION OF GEORGIA full minutes of each meeting and forward to it all scientific papers and discussions which the society shall consider worthy of publication.

CHAPTER VIII.—RULES AND ETHICS

Section 1. The deliberations of this Association shall be governed by parliamentary usage as contained in Robert's Rules of Order, when not in conflict with this Constitution and By-Laws.

Sec. 2. All papers read before the Association shall become its property. Each paper shall be deposited with the Secretary when read, and if this is not done it shall not be published.

Sec. 3. The principles of medical ethics of the American Medical Association shall be those of this Associa-

tion.

Sec. 4. Any member of this Association, on locating in a new place for practicing his profession, may place his professional card, containing name, address, telephone number, and statement as to whether or not his practice will be limited to any particular class of diseases, in the local paper for a period of not longer than one month. The placing of such card for this period of time shall not be considered unethical. The use of the word "specialist" by any member in connection with his name in any newspaper, telephone directory, or other public places, shall be considered unethical.

CHAPTER IX.—AMENDMENTS

These By-Laws may be amended at any annual session by a majority vote of the Association after the amendment has lain on the table for one day.

GEORGIA PHYSICIANS WHO HAVE PRACTICED MEDICINE FIFTY YEARS OR MORE

Arnold, John Thomas, Parrott
 Belcher, Francis S., Monticello
 Bell, Peyton E., Sylvester
 Boland, Frank Kells, Atlanta
 Born, Wade Hampton, McRae
 Brock, Walker Bell, Tallapoosa
 Byne, James Miller, Sr., Waynesboro
 Campbell, William H., Columbus
 Carter, Curtis Braxton, Columbus
 Chapman, William Allen, Cedartown
 Chisholm, Julian Ford, Savannah
 Clements, Henry W., Adel
 Collier, Thomas Jefferson, Atlanta
 Crawford, James Harden, Atlanta
 Crow, Leonidas Hamilton, Athens
 Crozier, Richard T., Fort Gaines
 Dove, William B., Macon
 Ellis, John W., Kennesaw
 Frederick, Donald Barton, Marshallville
 Garner, James Ryan, Atlanta
 Green, Thomas E., Chatsworth
 Greenleaf, James S., Savannah
 Harrell, David Braxton, Tifton
 Hines, Joseph Howard, Atlanta
 Horton, Barney Elliott, Atlanta
 Hudson, Benjamin B., Columbus
 Humphries, William Clayton, Acworth
 Hunt, G. M. D., Cordele
 Jefford, Thomas C., Sylvester
 Jelks, Edwin Lankin, Quitman
 Johnson, Joseph E. L., Roberta
 Keiser, John M., Athens
 Knight, Wyatt Edward, Mansfield
 Lanier, John Edward, Moultrie
 Lokey, Hugh Montgomery, Atlanta
 McElroy, Stephen L., Ocilla
 Miller, John N., R. F. D., Mitchell
 Patrick, Jekyl Zylba, Pulaski
 Pharr, Lucius P., Auburn
 Quillian, Willard Earl, Atlanta
 Roberts, C. A., Leary
 Roundtree, Walter, Summit
 Smith, Claude A., Stockbridge
 Swift, Addison K., Woodbine
 Train, John Kirk, Savannah
 Wade, Arthur C., Augusta
 Ward, John W., Baconton
 Warnell, John Braxton, Cairo
 Watkins, Edward Willis, Ellijay
 Weeks, John Luther, Harlem
 West, S. A., Dahlonega
 White, Henry Fleetwood, Crawfordville

NEWS ITEMS

The Alto Medical Center announces that Dr. W. G. Simpson has succeeded Dr. Eldis M. Christensen as director of the State Venereal Disease Rapid Treatment Center, Alto. Dr. Christensen who has served as director at Alto since September, 1948 has accepted a residency in surgery at Hines General Hospital in Chicago. During his term of office, Alto Medical Center gained national recognition as one of the nation's leading rapid treatment centers and was designated as a national training center for Venereal Disease Investigators and nurses. Dr. Simpson of Atlanta, graduated from Emory University Medical School in 1944 and joined the staff at Alto in April, 1949. "Under the leadership of Drs. Christensen and Simpson, Alto Rapid Treatment Center has become a hospital of which Georgia may well be proud. Thousands of Georgians have returned to their homes after treatment for syphilis and other venereal diseases and have been able to lead normal lives without endangering other people." Dr. C. D. Bowdoin, Director of the Division of Venereal Disease Control of the Georgia Department of Public Health, said.

* * *

The Albany Heart Clinic was held in the Kiwanis Clinic section of Phoebe Putney Hospital, Albany, January 18. Certifications went out to indigent heart disease patients who were examined at the first Albany Heart Clinic. Dr. J. A. Redfearn, Albany heart specialist, said all physicians of the medical staff of Phoebe Putney Hospital attended the opening session. With the work of the National Heart Association and the Georgia Heart Association spreading, many citizens, unable to pay for treatment when suffering from heart ailments, were served. Dr. David M. Wolfe, Albany, county health commissioner and his personnel, State Public Welfare Department personnel, Phoebe Putney Hospital, the Kiwanis Clinic participated in assisting the clinic.

* * *

Dr. J. D. Applewhite, Macon physician, recently resigned his position as Jones County Health officer. Dr. Applewhite has served as Jones County Health officer for the past 12 years. He said that the pressure of private practice and other duties necessitated the change. The resignation was announced by W. E. Knox, secretary of the board who said: "Dr. Applewhite has done an outstanding work in public health during his years as county health officer, and his resignation is a serious blow to the excellent health program in the county."

* * *

The Appling County Medical Society held its monthly dinner meeting at the Mimosa in Baxley February 14. Dr. Corbett Thigpen, Augusta psychiatrist, University Hospital, and a member of the Speakers Bureau gave an interesting lecture on "Depression." Doctors from the neighboring counties also were present. At the next meeting in March Dr. Thorek's moving picture on "Surgery of the Gallbladder" will be shown and a paper on jaundice will be read. The Appling County Hospital has been approved and bids are now being received for the construction of the building. A new Health Center building is being promoted at this time. Dr. J. B. Brown, Jr., secretary.

* * *

The Atlanta Chapter, American Red Cross blood program has 11 doctors appointed to the medical advisory committee, according to announcement made by Dr. A. O. Linch, president of the Fulton County Medical Society. The committee is Dr. Irving L. Greenberg, chairman, Drs. T. I. Willingham, R. Hugh Wood, W. Perrin Nicolson, James P. Hanna, Warren B. Matthews, Charles M. Huguley, Jr., Darrell Ayer, Milton Freedman, John Funke and Caroline K. Pratt.

* * *

The Atlanta Graduate Medical Assembly is rapidly becoming one of the important meetings of its kind in

the country, which means the world, said Dr. L. Minor Blackford. For the meeting of February 6, 7 and 8, 1950, the Assembly moved to the Annex of the Municipal Auditorium, Atlanta, the total attendance, including physicians who paid the \$15.00 registration fee, house officers and medical students, nurses and technicians, a few doctors' wives and other guests, amounted to 2,005. A large factor in this extraordinary increase was Colored Television. The apparatus for this was provided through the kindness of Smith, Kline and French Laboratories, who were persuaded to make Atlanta the sixth city in the world to see it. This program was opened with a splendid speech by Governor Herman Talmadge. In part he said: "This sixth annual meeting of the Atlanta Graduate Medical Assembly is a significant milestone in the whole history of medical and scientific progress. May I congratulate Dr. Letton and his committee; the Fulton County Medical Society; Smith, Kline and French Laboratories, Philadelphia, and the Columbia Broadcasting System for bringing to Georgia this unique method of teaching surgery through the new medium of color television. It is reassuring to me that you doctors have given this part of your time in order to be here and bring yourselves abreast of the latest in operating technics. This graduate assembly of medical men has no connection with any government agency but is being held here on a cooperative basis squarely under our system of free enterprise and individual initiative. The greatest menace we face in this country today and to the peace and security of the world are the twin evils of communism and socialism. You have my solemn pledge, both personally and officially, that all of my energies are dedicated toward helping you preserve the gains you have made and in going forward to even greater achievement."

Mayor Hartsfield expressed himself as being in entire accord with the Governor and welcomed the visitors to Atlanta.

The color television even exceeded the fondest expectations of the two thousand who saw it. Too much credit cannot be given to the authorities of Grady Memorial Hospital, to Dr. Ira A. Ferguson, Dr. R. Hugh Wood, Dr. Philip K. Bondy, and the various surgeons who operated anonymously, explaining as they went, and to the physicians who demonstrated various medical conditions and procedures. Perhaps the most spectacular exposition was the transplant of a cornea: the screen showed only the eye and a few inches around it; certainly in no other way could anyone but the surgeon and his first assistant have witnessed the procedure half so well as did the five hundred who watched it in colored television. Illness of one guest speaker required a substitution a few days before the Assembly; otherwise the program was carried through as originally announced.

Social features were held to a minimum as the primary object of the Assembly is educational. Dr. Edgar R. Pund, Augusta, professor of pathology of the Medical College of Georgia, was the only Georgia physician listed among the nation's leading specialists in medicine and surgery who participated on the program of the assembly. Dr. L. Minor Blackford, secretary.

* * *

The Bibb County Medical Society held its dinner meeting at the S & S Cafeteria, Macon, February 14. Scientific program: "New Developments in Antibiotic Therapy" by Dr. Harold Atkinson. Dr. Henry H. Tift, secretary.

* * *

The Bibb County Tuberculosis Association, Inc., helps discover new cases of tuberculosis and provide equipment and aid to patients, Dr. R. Frank Cary, Macon, city-county health officer, said. Tuberculosis is the "major health problem" in Bibb County. It, he said, is a disease which must be fought by "every citizen." One sure way to help in the battle against it, he continued, is to support the association, which is financed through the annual sale of Christmas Seals. Twelve new cases of tuberculosis were discovered during January

by the health department.

* * *

The Minnie G. Boswell Memorial Hospital medical staff held its regular monthly meeting at the hospital, Greensboro, January 4. The following physicians were present: Drs. H. L. Cheves, Union Point, T. W. Middlebrooks, Crawfordville, J. Lee Parker, Jr., F. H. Killam, W. N. Etheridge, Easley and Lawrence, all of Greensboro. Dr. D. F. Mullins, Jr., Athens, consulting pathologist of the Minnie G. Boswell Memorial Hospital, was also present. Guests were: Drs. Richard Torpin and Taylor, University Hospital, Augusta, and Dr. Bird of Athens. Dr. Torpin discussed "Some Obstetric Emergencies." Officers for last year were reelected to serve another year: Dr. H. L. Cheves, chief of staff, Dr. F. H. Killam, assistant chief of staff, and Dr. W. N. Etheridge, secretary.

* * *

Dr. Louis G. Cacchioli and Dr. J. Hubert Milford, both of Hartwell, were elected to serve on the staff of the Cobb Memorial Hospital, Royston, at a meeting of the Board of Trustees held at the hospital, January 12.

* * *

The Chatham-Savannah Health Council held its annual meeting in the Gold Room of the DeSoto Hotel, Savannah, January 23. Dr. Lucille J. Marsh, Atlanta, regional medical director for the Children's Bureau of the U. S. Department of Labor, was guest speaker, who recommended that the council consider the establishment of a nursery school for handicapped children which would prepare them, during pre-school age, for the inevitable adjustment demanded of them later. At the conclusion of her address, Dr. Clair A. Henderson, city-county health officer, informed the audience that a Children's Council committee was studying that very problem and expressed the hope that progress along the lines suggested could be reported. Dr. Albert J. Kelley succeeds Dr. Ruskin King as president of the Chatham-Savannah Health Council. Dr. H. H. McGee, was named president-elect. Other physicians elected to serve on the board are Drs. Lawrence Lee, H. M. Kandel, Ruskin King, Anne Hopkins, T. A. Peterson, S. P. Stoddard and Bland Tucker. A rising vote of thanks was tendered Dr. King as he relinquished office.

* * *

The Colquitt Medical Society held its meeting at Moultrie, January 10. Officers for 1950 are Dr. R. E. Stegall, president, Dr. John F. McCoy, vice-president, Dr. R. E. Fokes, secretary-treasurer, and Dr. J. E. Lanier, president emeritus. Board of Censors: Drs. A. G. Funderburk, R. M. Joiner, and Edgar Holmes. Following the meeting of the medical society, the Vereen Memorial Hospital staff elected Dr. J. R. Paulk, president for 1950, and Dr. R. E. Stegall was named vice-president.

* * *

Dr. E. D. Colvin, Atlanta, was recently named president-elect of the South Atlantic Association of Obstetricians and Gynecologists at the twelfth annual meeting of the association held at Roanoke, Va. Dr. Colvin, former secretary-treasurer, was succeeded in that post by Dr. John Burwell, of Greensboro, N. C. President for 1950 is Dr. Lester A. Wilson, of Charleston, S. C.

* * *

Dr. William A. Dodd, Dublin, was named county physician by the Laurens County Board of Commissioners of Roads and Revenues for 1950. Dr. Dodd succeeds Dr. R. G. Ferrell who has served as county physician for some years. Dr. Dodd, a native of Macon, went to Dublin approximately a year ago to become associated with Dr. A. T. Coleman at the Coleman Hospital.

* * *

Dr. M. J. Egan, Savannah physician, was re-elected president of the Hospital Service Association at the annual meeting held January 17. Dr. E. C. Demmond was elected vice-president. Dr. T. P. Waring representing Oglethorpe Hospital, and Dr. E. C. Demmond, Telfair Hospital, were named members of the executive committee.

Dr. John L. Elliott, Savannah, recently addressed the student nurses of St. Joseph's and Warren A. Candler's schools of nursing. His subject was "The General Principles of Treatment of Tuberculosis." The address was part of the course in tuberculosis given each year by the Chatham-Savannah Tuberculosis and Health Association.

* * *

Dr. Marion Estes, Augusta, assistant professor of psychiatry at the University of Georgia School of Medicine, discussed "Psychological Aspects of Cerebral Palsy" at a meeting of the members of the Augusta Area Chapter of the Cerebral Palsy Society, held at the Georgia Power Company auditorium. Dr. Estes outlined the basic needs of every child as: 1. Need for security, including backing of both parents; 2. Need for love and understanding; 3. Need for satisfactory emotional expression.

* * *

Dr. Murdock Eguen, Atlanta, recently attended the meeting of the American Laryngological, Rhinological and Otolological Society held in Memphis, Tenn.

* * *

The Fulton County Medical Society held its semi-monthly dinner meeting at the Academy of Medicine, Atlanta, February 2. Scientific program opened with Dr. William Cleve Ward presiding as moderator, "Penetrating Wounds of the Chest", Dr. Hilton Wall and Dr. Roy E. Campbell; "Case of Virus Encephalitis", Dr. David Ginder and Dr. Alvan Foraker; "deQuervain's Disease", Robert P. Kelly. Dr. A. Worth Hobby, secretary.

* * *

Dr. Lester Brown, Atlanta, has been named president-elect of the medical and surgical staff of Crawford W. Long Memorial Hospital, Atlanta.

* * *

The Georgia Baptist Hospital medical staff held its dinner meeting in the cafeteria of the hospital, Atlanta, February 21. Dr. A. L. Evans, Atlanta, chairman of the Clinico-Pathological Committee reported two short and interesting cases for discussion. Dr. J. G. McDaniel, secretary.

* * *

The Georgia Medical Society held its regular meeting at 612 Drayton Street, Savannah, February 14. Scientific program: "Dietary Treatment of Hypertension", Dr. Harry E. Rollings, and "Retinal Vascular Changes in Hypertension", Dr. J. Harry Duncan. Dr. Sam Youngblood, Jr., secretary.

* * *

The Georgia physicians participating on the program of the Southeastern Allergy Association at its fifth annual meeting held in Columbia Hotel, Columbia, S. C., February 11 and 12, were Dr. Lewis D. Hoppe, Atlanta, was moderator of the panel on pediatric allergy, and introduced Dr. Lee Bivings, Atlanta, who read a paper entitled "Dermatological Allergy", and Dr. William Kiser, Atlanta, also presented a paper "Psychosomatic Aspects of Allergy."

* * *

Dr. Louie H. Griffin, Claxton physician since 1939, was recently admitted to the courtesy and medical staff of the Bulloch County Hospital, Statesboro. Dr. Griffin graduated from the University of Georgia School of Medicine, Augusta, in 1937, and began the practice of medicine in Claxton in 1939. After almost five years in the Medical Corps during World War II, he returned to Claxton in 1945 to resume his practice of medicine.

* * *

The Habersham County Medical Society held its monthly meeting at the home of Dr. and Mrs. B. J. Roberts, Cornelia, February 9. Dr. H. E. Valentine, Jr., Gainesville, spoke on "The Management of the Cardiac Patients." Dr. Valentine is on the associate staff at Downey Hospital, Gainesville. The Woman's Auxiliary to the Habersham Medical Society also met with Dr. and Mrs. Roberts.

* * *

Dr. C. W. Harwell, Cordele, county health commissioner for Crisp and Worth Counties has resigned to

accept a similar position for the counties of Mitchell and Grady with headquarters at Camilla. Dr. L. E. Williams, Cordele, chairman of the Crisp County Commissioners said the board of commissioners accepted the resignation and praised the work Dr. Harwell has done since he came to Cordele in 1941.

* * *

Dr. Harriet E. Gillette, Atlanta, recently conducted a diagnostic cerebral palsy clinic at the University of Georgia School of Medicine, Augusta. The clinic marked a new and major milestone in the progress being made toward securing a treatment and training center for the cerebral palsied children of the Augusta area. Dr. Gillette, nationally known authority on cerebral palsy, is a pediatrician and specialist in physical medicine.

* * *

Dr. Frank P. Holder, Jr., Eastman physician, was one of 14 to be sworn in by Governor Herman Talmadge as appointees to boards January 16. He will serve as a member of the Workmen's Compensation Medical Board.

* * *

Dr. Leon Holloman, Savannah physician, addressed the members of the Savannah Society of Medical Technicians, on the subject of "Cancer of the Breast" and later a movie on the subject was shown the technicians. He advised women to undergo a careful examination at regular intervals and cautioned that a physician should be immediately consulted if a lump develops in the breast.

* * *

Dr. M. L. Howard, former Dawsonville physician, announces the opening of his offices in the Jordan Drug Store Building, Ellaville, for the practice of medicine. A native of Dawson County, Dr. Howard graduated from George Washington University School of Medicine, Washington, D. C. in 1942. After serving in the Medical Corps of the U. S. Navy during World War II for three years, he returned to Dawsonville to establish his practice of medicine.

* * *

Dr. Harry Hutchins, Buford physician, was recently released from the U. S. Navy Medical Corps and has resumed his duties at the Hutchins Memorial Hospital, Buford.

* * *

The Jenkins County Medical Society held its annual meeting in January and elected the following officers: Dr. Austin P. Fortney, Sylvania, president; Dr. Cleveland Thompson, Millen, secretary-treasurer; Dr. Grady Lee, Millen, delegate to the annual session of the Medical Association of Georgia to be held in Macon, April 18-21; Dr. W. G. Simmons, Sylvania, alternate delegate. Dr. A. P. Mulkey, Millen, is the outgoing president. Dr. Fortney began the practice of medicine in Sylvania following his release from the U. S. Army Medical Corps during 1949. He is associated with Dr. James Freeman in the operation of Huldah Cail Memorial Hospital, Sylvania.

* * *

Dr. J. E. L. Johnson, beloved family doctor of Roberta and Crawford County for more than 50 years, was recently honored when the people from throughout the county joined in a celebration in appreciation for the services of this "grand man of medicine." Dr. Johnson moved to Roberta in 1896, and now at the age of 82 still does office practice and makes occasional calls. He is a Mason and a Woodman of the World member, joining the orders years ago. He has served as mayor of Roberta for several years. He is an outstanding citizen and successful physician. Sharing honors with Dr. Johnson was Mrs. Johnson. On February 19 they celebrated their sixtieth wedding anniversary and this celebration was a two-purpose celebration. Congratulations to Dr. and Mrs. Johnson!

* * *

Dr. H. M. Kandel, Savannah physician, president of the Georgia Medical Society and president of the Savannah Reserve Officers Association, was recently presented with the first officers' identification card issued to

personnel taking part in the reserve program. The identification card is similar to the one issued regular army personnel. Lt. Col. Kandel recently finished active duty at Ft. Benning, having been called to service by the Surgeon General of Third Army Headquarters because of an extreme shortage of physicians in army hospitals in this area. Dr. Kandel returned to Savannah on February 1.

* * *

Dr. Albert J. Kelley, Savannah, a Northwestern University Medical School, Chicago, graduate in 1928, has been appointed by Northwestern University to serve as Georgia state chairman in a drive to raise \$500,000 among alumni for the university's medical school by 1951. The funds will be used as endowment for the Archibald Church Library at the medical school, one of the five largest medical school libraries in the nation.

* * *

Dr. G. Lombard Kelly, Augusta, dean of the University of Georgia School of Medicine, recently returned to Augusta following a trip to Kansas City and Chicago, where he attended meetings of importance.

* * *

The Fulton County Medical Society held its dinner meeting at the Academy of Medicine, Atlanta, February 16. Scientific meeting called to order by Dr. John W. Turner, moderator. "Cardiac Arrhythmias: Their Recognition and Treatment", Dr. Jeff L. Richardson; The Heart in Anesthesia: The Effects of Different Anesthetic Agents", Dr. Hayward S. Phillips; "Rheumatic Disease", Dr. L. Minor Blackford. Dr. A. Worth Hobby, secretary.

* * *

Dr. Edgar H. Greene, Atlanta, president-elect of the State Board of Medical Examiners, represented the Georgia board at the 46th Annual Congress on medical education and licensure held at the Palmer House, Chicago, February 5-7, which was a joint meeting with the following: the National Board of Medical Education, Advisory Board for Medical Specialties and the Federation of State Medical Boards of the United States.

* * *

Dr. Edgar H. Greene, Atlanta, immediate past-president of the Medical Association of Georgia, recently spoke before the Civitan Club of Buckhead. His subject was "The Threat of Socialized Medicine." He discussed the plans proposed by the Medical Association of Georgia.

* * *

Dr. Spencer A. Kirkland, Dr. Jack C. Norris and Dr. Edgar D. Shanks, all of Atlanta, represented the Medical Association of Georgia at the second annual conference of the National Education Campaign of the American Medical Association held at the Drake Hotel, Chicago, February 12.

* * *

The Laurens County Medical Society members were guests of Dr. Tyrus R. Cobb, Jr., retiring president, at a dinner meeting at the Duhlin Country Club, Dublin, February 2. Guest speaker was Dr. Thomas L. Ross, Jr., Macon cardiologist, whose subject was "Coronary Heart Disease." Officers elected for 1950 were: Dr. M. Fernan-Nunez, Dublin, VA Hospital, president; Dr. Charles A. Hodges, Duhlin, vice-president, and Dr. O. H. Cheek, Dublin, secretary-treasurer. This marks Dr. Cheek's twenty-fifth successive year in this office of the Laurens County Medical Society.

* * *

Dr. J. J. Lott, Broxton physician, loved by the entire town and community, observed his sixty-seventh birthday, January 6, in a quiet and normal manner as he went about ministering to the needs of not only his patients but his friends. As he concluded his day's work and retired to his home he was surprised to find many useful gifts that had been sent in by thoughtful friends and loved ones.

* * *

Dr. Robert F. Mabon, Atlanta, announces the opening of his office at 478 Peachtree St., N. E., Atlanta. Practice limited to neurologic surgery.

The Mercy Hospital, Macon, announced that an 80-doctor medical staff has been named to work with the institution during 1950. Dr. James B. Kay, Byron, is president; Dr. W. D. Jarrett, Macon, president-elect; Dr. J. D. Applewhite, Macon, vice-president, and Dr. E. C. McMillan, secretary. Dr. Willard R. Goslan, Macon urologist, was elected by the board of governors as a member to serve a three-year term. The medical staff's active membership includes 39 Macon physicians. The eight physicians on Mercy's consulting staff are: Drs. F. R. Cary, R. W. Edenfield, C. Hall Farmer, J. F. Hanson, M. B. Hatcher, Max Mass, Alvin E. Siegel, and Frank Vinson. There are 33 doctors on Mercy's courtesy list for 1950. Dr. Kay appointed two committees with identical memberships which deal with related subjects. Named to the medical records committee and the program committee, with Dr. J. F. Hanson as chairman of both, were: Drs. Jule C. Neal, C. L. Ridley, Jr., and Charles Rumble. Drs. Willard R. Goslan, J. D. Applewhite and Henry H. Tift are members of the board of governors.

* * *

Dr. Carey A. Mickel, Jr., Elberton surgeon, announces the removal of his offices for the practice of general surgery to his new clinic building at 35-37 Chestnut St., Elberton.

* * *

Dr. Seward E. Miller, Atlanta, has been appointed director of the Federal Security Agency's Region 5, Chicago. For the past five years he has been chief of laboratory services for the U. S. Public Health Service Communicable Disease Center, Atlanta. His successor will be Dr. Ralph B. Hogan, now in charge of research for the venereal disease division of the Public Health Service, in Washington.

* * *

Dr. William Benjamin Nalley, formerly of Gainesville, who recently received his discharge from the U. S. Army, announces the opening of his office for the practice of medicine at Helen and White County.

* * *

The Marietta Hospital Authority has named Dr. Mayes Gober, Marietta surgeon, president of the medical staff of the new Kennistone Hospital; Dr. Ralph Fowler, Marietta, staff vice-president, and Dr. W. C. Mitchell, Smyrna, secretary. The new officials will serve for one year and cannot succeed themselves. Members of the Cobb County Medical Society form the nucleus of the 105-bed hospital's present staff. It will elect a permanent credentials committee to recommend further staff appointments. All appointments must be endorsed by the seven-member hospital authority.

* * *

The Polk General Hospital, Cedartown, elected Dr. J. Howard Hagan, Rockmart, vice-president of the professional staff at a meeting held in Cedartown, January 17; he succeeds Dr. Raymond F. Spanjer, Cedartown. Other officers elected include Dr. Raymond F. Spanjer, chief of staff, to succeed Dr. C. B. Elliott, and Dr. P. O. Chaudron, secretary, to succeed Dr. J. J. Word, who moved to Tallapoosa. Members of the staff from Rockmart are Drs. J. Howard Hagan, R. B. Goldin, Harold Goldin, J. E. Griffith, George M. White and T. E. McBryde.

* * *

The Randolph-Terrell Medical Society, the Georgia Heart Association and the Georgia Department of Public Health held the fourth of a series of symposiums to be held throughout Georgia under the sponsorship of the Georgia Heart Association, in cooperation with the Georgia Department of Public Health, at Cuthbert, February 10. Dr. Arthur M. Knight, Jr., Waycross physician, spoke on "The Diagnosis and Treatment of the Cardiac Arrhythmias," "The Treatment of Coronary Thrombosis and the use of Anticoagulants", Dr. James W. Chambers, LaGrange, and "The Modern Treatment of Heart Failure", Dr. Ernest Wahl, Thomasville.

* * *

The Richmond County Medical Society held its

monthly meeting in the Old Medical College Building on Telfair Street, Augusta, January 24. The program began at 7 o'clock, and was followed by a dinner and reception, and was held jointly with the Tenth Seminar which was in progress at the University of Georgia School of Medicine. Guest speakers were Dr. Herbert R. Hawthorne, Philadelphia, professor of surgery at the University of Pennsylvania Post-Graduate School of Medicine, and Dr. Henry J. Tuman, Philadelphia, associate professor of medicine at the University of Pennsylvania School of Medicine. The speakers discussed "The Surgical and Medical Aspects of Carcinoma of the Stomach."

* * *

Dr. Frank M. Ridley, LaGrange physician, has been reappointed as Troup County physician by the Troup County Board of Commissioners of Roads and Revenues.

* * *

Dr. C. L. Ridley, Sr., Macon, superintendent of Macon Hospital, recently attended the meeting of the District Hospital Convention held at Warm Springs. There were 13 hospitals represented at the session, which meets once a month. The district comprises and extends from Columbus, LaGrange to Macon.

* * *

Dr. Thomas L. Ross, Jr., Macon physician, was guest speaker at a symposium on cardiovascular diseases at the Washington Woman's Club in Washington, January 26. This was the third of a series of symposiums on this subject to be held throughout Georgia under the sponsorship of the Georgia Heart Association, in connection with the Georgia Department of Public Health. Other speakers were Dr. Hartwell Joiner, Gainesville, and Dr. C. B. Fulghum, Milledgeville. The Wilkes County Medical Society also participated in sponsorship of the symposium.

* * *

The Southeastern Section of the American Urological Association comprising nine southern states including Georgia, held its annual meeting at the Edgewater Gulf Hotel, Gulfport, Miss., February 1-4. Dr. Carl Rusche, of Hollywood, Calif., president of the American Urological Association, was one of a number of prominent urologists addressing the meeting. Other speakers from Georgia included Drs. C. A. Fort, Harrison Harlin, James H. Semans, and Dr. Harold P. McDonald, all of Atlanta. Other Georgia members present were: Drs. Spencer A. Kirkland, Reese C. Coleman, Jr., M. K. Bailey, Earl Floyd, Montague L. Boyd, Stephen T. Brown, Major F. Fowler, Charles Rieser, Samuel J. Sinkoe, Atlanta; Dr. J. Robert Rinker, Augusta; Drs. J. Zeb McDaniel and J. C. Keaton, Albany; Dr. W. F. Reavis, Waycross; Dr. Peter L. Scardino, Savannah; Dr. Rudolph Bell, Thomasville; Dr. Wallace L. Bazemore, Macon, and Dr. James L. Campbell, Jr., Valdosta.

* * *

The South Georgia Medical Society held its dinner meeting at the Country Club, Valdosta, January 10. The purpose of the society is to keep practicing physicians abreast of new developments in the field of medicine and to provide a united group to cope with situations which may arise in South Georgia. Officers for 1950 are Dr. J. Raymond Smith, Hahira, president; Dr. Harry Mixson, Valdosta, vice-president; Dr. Jesse Parrott, Hahira, secretary-treasurer; Dr. Alex G. Little, Jr., Valdosta, and Dr. Fred N. Clements, Adel, delegates to the annual session of the Medical Association of Georgia; Dr. James S. Peters, Jr., Nashville, censor, and Dr. James L. Campbell, Jr., Valdosta, program chairman. Dr. C. W. Ketchum, Valdosta, is the retiring president.

* * *

Dr. James H. Semans, Atlanta urologist, recently held a surgical clinic at Charity Hospital, New Orleans, demonstrating radical perineal prostatectomy for early cancer of the prostate.

* * *

Dr. William P. Stoner, Waycross, chief of staff of A.C.L. Railroad Hospital, announces the removal of his

office to Sylvester, where he will be in charge of the new hospital.

* * *

The University of Georgia School of Medicine, Augusta, held in cooperation with the American Cancer Society and the cancer control division of the Georgia Department of Public Health, a four day seminar on cancer, under the supervision of Dr. Hoke Wammock, the cancer coordinator of the department of oncology of the medical school. The seminar was held for the benefit of general practitioners of medicine, practicing physicians who devote considerable time to tumors, and specialists in the field of tumors. Lecturers at the seminar included Dr. Herbert R. Hawthorne, Philadelphia, professor of surgery at the University of Pennsylvania Post-Graduate School of Medicine, and Dr. Henry J. Tuman, Philadelphia, associate professor of medicine at the University of Pennsylvania School of Medicine. Also Drs. J. M. Bazemore, G. T. Bernard, E. R. Pund, J. Elliott Scarborough, David Henry Poer, V. P. Sydenstricker, Sam Singal, M. Belkin, J. R. Heller, W. A. Risteen, R. C. Major, Stephen Brown, Everett L. Bishop, H. E. Nieburgs, Enoch Callaway, F. Bayard Carter, Richard Torpin, R. B. Greenblatt, W. L. Sheppard, Charles W. Hock, J. H. Sherman, J. R. Rinker, Peter B. Wright, and Dr. Hoke Wammock.

* * *

Dr. T. A. Sappington, Thomaston physician, was re-elected vice-president of the Georgia Mutual Hospitalization Service at the meeting of the board of directors held at the Upson Hotel, Thomaston, January 17. Drs. B. C. Adams and John D. Blackburn, of Thomaston, were elected to the board of directors. The meeting was held jointly with the Georgia Life and Health Insurance Company, with W. L. Bryan, president and Hal Griffin, both of Atlanta attending.

* * *

The Upson County Medical Society recently appointed Dr. R. E. Dallas, Thomaston physician, to serve on a committee to work out the Constitution and By-Laws for the new Upson County Hospital, from a medical standpoint, and to form the hospital staff. Other members of the committee are Drs. R. L. Carter, John D. Blackburn, James Woodall, and H. D. Tyler.

* * *

Dr. Perry P. Volpito, Augusta, professor of anesthesiology, University of Georgia School of Medicine, was a member of the guest faculty of the fifth annual series of intensive postgraduate courses of the George Washington University School of Medicine, Washington, D. C., in the section on anesthesiology, February 27-March 3. The course was held in the Main Conference Room of the George Washington University Hospital where Dr. Volpito presented two papers and participated in three conferences during the postgraduate courses.

* * *

Dr. Ernest F. Wahl, Thomasville physician, was in charge of the Heart Campaign in the second congressional district and also director of the Thomas County campaign. February is devoted throughout the country to the collection of funds for the continuation of heart research and the establishment of clinics. It is regarded as one of the major health operations of the country, with many chances of reducing the heart diseases that are taking too many lives each year.

* * *

The Ware County Medical Society held its dinner meeting at the Hotel Ware, Waycross, with Dr. B. H. Minchew and Dr. Braswell E. Collins as hosts. Dr. B. H. Minchew introduced the guest speaker, who is his nephew, Dr. Wilbur C. Sumner, of Jacksonville, Fla. Dr. Sumner discussed the modern methods of treating cancer and reported that 60 per cent of cancer cases are being cured with radium, x-ray and surgery. Guests attending the meeting included Drs. Earl Mackey and Tom Smith, Valdosta; Dr. J. B. Brown, Jr., Baxley; Dr. Richard K. Winston, Tifton; Minchew Harrell and Tom Kerby. Dr. W. A. Hendry, Blackshear, president,

presided over the meeting which was attended by 28 physicians.

* * *

The Whitfield County Medical Society held its monthly meeting in Dalton, December 6. The society paid tribute to the memory of Drs. John Henry Steed and George S. Kerr, recently deceased members. In paying tribute to Drs. Kerr and Steed, the document cited their self-sacrificing devotion to the high purpose of the medical profession, their skill, and their unselfish devotion to all mankind. Officers for 1950 elected are Dr. Truman Whitfield, Dalton, president; Dr. E. A. Rosen, Dalton, vice-president; Dr. H. J. Ault, Dalton, secretary-treasurer; Dr. G. L. Broadrick, Dalton, delegate; Dr. Paul Bradley, Dalton, alternate delegate, and Dr. James R. Whitley, Dalton, censor. The society consists of twenty physicians and surgeons from Whitfield County and immediate vicinity.

* * *

Dr. Peter B. Wright, Augusta, professor of orthopedic surgery of the Medical College of Georgia, recently attended the annual meeting of the American College of Orthopedic Surgeons held in New York City. Dr. Wright presented an exhibit on "Paget's Disease". Drs. T. P. Waring and F. B. Brown, both of Savannah, also attended the above named meeting.

* * *

Dr. Frank K. Boland, Atlanta surgeon, holds the honor of being selected as the first guest speaker at the annual lectureship honoring Dr. Urban Maes at the Louisiana State University School of Medicine, New Orleans, February 8. Dr. Boland discussed "The Beginning of Surgical Anesthesia." The Phi Chi Medical Fraternity sponsored the meeting.

* * *

Dr. Roger W. Dickson, Atlanta, recently attended the meeting of the educational committee of the American Academy of Pediatrics held in Winston-Salem, N. C.

* * *

Dr. Laura L. Lipscomb, Atlanta pediatrician, is in New York City taking special courses in pediatrics, tropical diseases and languages, prior to going as a medical missionary to India. Dr. Lipscomb will head the pediatrics department in the hospital at the University of Madras, Bellore, India.

OBITUARY

Dr. Barton Brown, aged 82, retired Savannah physician, died at a local hospital January 28, 1950. Dr. Brown was born in Williamsport, Pa. in 1867. He graduated from the University of Pennsylvania School of Medicine, Philadelphia, in 1891, and for many years after that served in private practice in Pennsylvania. In January 1918, he entered the U. S. Army as captain for World War I duty. He was stationed for a short time at Fort Oglethorpe and at Fort Sam Houston, Texas, and then was transferred to Fort Screven, where he got his introduction to Savannah before being discharged in December 1918. After his return to civilian life for approximately 16 months, he joined the U. S. Quarantine Service, a branch of the U. S. Public Health Service. He came to Savannah in 1921 to assume the directorship of the United States Quarantine Station. After being transferred to a number of other places, he returned to Savannah for the third time for a short while before his retirement December 1, 1937. He was a member of the Medical Society of the State of Pennsylvania. He was a Thirty-second Degree Mason, a Shriner, and a Scottish Rite Mason, being an honorary life member at Conders Port, Pa. He is survived by his wife, the former Miss Sara Cohick, of Pennsylvania. The funeral services and burial were held at Williamsport, Pa.

* * *

Dr. James Arren McAllister, aged 57, Atlanta, chief medical officer of the Georgia regional Veterans Administration office, died unexpectedly in his office of a heart attack, February 16, 1950. A native of Mt. Vernon, Dr. McAllister was an honor graduate of Emory University

School of Medicine, Atlanta, in 1914. He was a veteran of World War I, and had been associated with the Veterans Administration for the past 20 years. He had served as chief medical officer for the past three years and before that was chief of the out-patient clinic at the VA hospital. He was a member of the Fulton County Medical Society, the Medical Association of Georgia, a fellow of the American Medical Association, and a member of the First Presbyterian Church. His residence was at 126 East Wesley Road, N. E., Atlanta. Surviving are his widow, Mrs. Tressie Fitts McAllister, two sons, Gordon McAllister, Augusta, and James A. McAllister, Jr., Atlanta, four sisters, two sisters-in-law, and two grandchildren. Funeral services were held at the First Presbyterian Church. Dr. William V. Gardner, pastor, officiated. Members of the Fulton County Medical Society and employees of the Veterans Administration acted as honorary escort. Burial was in West View Cemetery, Atlanta.

* * *

Dr. Loundes Walton Shaw, aged 58, Savannah urologist, died unexpectedly of a heart attack at his home at Isle of Hope, January 26, 1950. A native of Willacochee, Dr. Shaw graduated from Emory University School of Medicine, Atlanta, in 1915, and from the University of Vienna in Austria. He spent practically his entire medical career in Savannah. He was a member and past president of the Georgia Medical Society, the Medical Association of Georgia, and a fellow of the American Medical Association. Also a member of the American Urological Association. Dr. Shaw was a member of Christ Episcopal Church, and Ancient Landmark Lodge No. 231 of the Free and Accepted Masons. Since 1916 he had been on the staff of the United States Marine Hospital, handling its urologic cases. He was also on the staffs of St. Joseph's and the Warren A. Candler Hospitals. He is survived by his wife the former Miss Mildred Carr; two sons, Richard and Julian Shaw, all of Savannah; his mother, Mrs. F. A. Shaw, Willacochee, and two brothers. Funeral services were held at the chapel of Sipple's Mortuary with the Rev. F. Bland Tucker, rector of Christ Episcopal Church, officiating. Burial was in Hillcrest Memorial Park Cemetery, Savannah.

* * *

Dr. James Simpson Tankersley, aged 90, widely-known physician of Ellijay and Gilmer County, died in a Canton hospital, February 11, 1950. A native of Gilmer county, Dr. Tankersley was graduated from the Atlanta Medical College which is now Emory University School of Medicine, Atlanta, in 1884. He was one of the oldest graduates of Emory. Dr. Tankersley was a member of the Ellijay Baptist Church and a Mason. Last year he received a Fifty-Year Certificate of Distinction and a gold lapel button from the Medical Association of Georgia. Also a 50-year membership pin from the Ellijay Masonic Lodge. He is survived by a son, James S. Tankersley, Jr., and one granddaughter, both of Ellijay. Funeral services were held at the Ellijay Baptist Church with the Rev. H. P. Bell and the Rev. A. B. Couch officiating. Burial was in the City Cemetery, Ellijay.

NEW BOOKS

Quinidine in Disorders of the Heart. By Harry Gold, M.D., Professor of Clinical Pharmacology at Cornell University Medical College, Attending-in-Charge of the Cardiovascular Research Unit at the Beth Israel Hospital, Attending Cardiologist at the Hospital for Joint Diseases, Managing Editor of the Cornell Conferences on Therapy. Cloth. Price, \$2. Pp. 115. Paul B. Hoeber, Inc., Medical Book Department of Harper & Brothers, 49 East 33rd Street, New York 16, N. Y., 1950.

This small book presents full discussion of the use of quinidine in disorders of the heart. Among other things it states: "Digitalis is the most effective drug against auricular tachycardia. Quinidine is the only drug effective against ventricular tachycardia, and in this condition there is the possibility that digitalis may do harm."

While the author stresses the importance of accurate diagnosis, at the same time he says "cases of disordered rhythm in which the differential diagnosis between the various mechanisms cannot be made do not need to go without specific therapy which offers a high probability of success. Quinidine should be tried in these cases."

* * *

Brucellosis (Undulant Fever) Clinical and Subclinical. By Harold J. Harris, M.D., F.A.C.P., with the assistance of Blanche L. Stevenson, R.N. Foreword by Walter M. Simpson, M.S., MD., F.A.C.P. Second edition. Cloth. Price \$10. Pp. 617, with 111 illustrations, 12 in full color. Paul B. Hoeber, Inc., Medical Book Department of Harper & Brothers, 49 East 33rd Street, New York 16, N. Y., 1950.

In this attractive book an honest effort has been made to bring up-to-date knowledge of brucellosis, long a troublesome condition which, unfortunately, is not diagnosed and treated as often as many wish. This book should be in every physician's library.

* * *

Diseases of the Foot. By Emil D. W. Hauser, M.S., M.D., Associate Professor of Bone and Joint Surgery, Northwestern University Medical School. New, Second Edition. 415 pages with 195 figures. Philadelphia and London: W. B. Saunders Company, 1950. Price \$7.00.

Dr. Hauser has written an attractive book. He leads off with discussion of the anatomy and physiology of the foot, and then takes up methodically the various conditions affecting the foot, followed by suggestions for their correction. This book should be in every physician's library.

* * *

Cardiovascular Disease. Fundamentals, Differential Diagnosis, Prognosis and Treatment. By Louis H. Sigler, M.D., F.A.C.P., Attending Cardiologist and Chief of Cardiac Clinic, Coney Island Hospital; Consulting Cardiologist, Rockaway Beach Hospital; Consulting Cardiologist, Menorah Home and Hospital for the Aged. Cloth. Price, \$10. Pp. 551, with illustrations. Grune & Stratton, Inc., Medical Publishers, 381 Fourth Avenue, New York 16, N. Y., 1949.

Another good book on cardiovascular disease. While any book which attempts to portray this subject in full is to face the question, "What are the most essential things to include?", Dr. Sigler seems to have used good judgment in crowding into one average size volume much valuable information, particularly that dealing with the clinical aspects of the subjects covered.

* * *

Mitchell-Nelson's Textbook of Pediatrics: Edited by Waldo E. Nelson, M.D., Professor of Pediatrics, Temple University School of Medicine; Medical Director, Saint Christopher's Hospital for Children, Philadelphia. With the Collaboration of Sixty-Three Contributors. New, 5th Edition. 1658 pages with 426 illustrations, 19 in color. Philadelphia and London: W. B. Saunders Company, 1950. Price \$12.50.

Textbooks are so often thought of as being cumbersome; yet when one wishes to search for all available information on any subject he or she is likely to turn first to an up-to-date and authoritative textbook. Such authoritative work is Mitchell-Nelson's book on pediatrics. It is well edited, attractively presented and contains a wealth of material by its more than 63 contributors.

COUNTIES REPORTING FOR 1950

Baldwin County Medical Society

President—Melvin E. Smith, Milledgeville
Vice-President—Wallace M. Gibson, Milledgeville
Secretary-Treasurer—Robert D. Waller, Milledgeville
Delegate—Y. H. Yarbrough, Milledgeville
Alternate Delegate—O. C. Woods, Milledgeville
Censors: Y. H. Yarbrough, R. W. Bradford and John D. Wiley

Bulloch-Candler-Evans Medical Society

President—Waldo E. Floyd, Statesboro
Vice-President—Curtis G. Hanes, Claxton

Secretary-Treasurer—Elizabeth Fletcher, Statesboro
Delegate—Louie H. Griffin, Claxton
Alternate Delegate—John Mooney, Jr., Statesboro
Censors: Ben A. Deal, W. E. Simmons and J. H. Whiteside

Coffee County Medical Society

President—H. G. Joiner, Douglas
Vice-President—H. J. Goodwin, Douglas
Secretary-Treasurer—Sage Harper, Douglas
Delegate—L. H. Shellhouse, Willacoochee
Censor: G. M. Ricketson

Fulton County Medical Society

President—A. O. Linch, Atlanta
President-Elect—Hal M. Davison, Atlanta
Vice-President—Cyrus W. Strickler, Jr., Atlanta
Secretary-Treasurer—A. Worth Hobby, Atlanta
Delegates—A. O. Linch, Stephen T. Brown
Hal M. Davison, Eustace A. Allen, A. Worth Hobby, William G. Hamm, Jack C. Norris, Cyrus W. Strickler, Jr., John W. Turner, Major F. Fowler, Shelley C. Davis, J. D. Martin, Jr., C. Purcell Roberts
Alternate Delegates—A. Park McGinty, Lester Brown, J. G. McDaniel, Mark Dougherty, David Henry Poer, Tully T. Blalock, Harry Rogers, George Holloway, Harold McDonald, J. C. Blalock, H. Walker Jernigan, Hayward S. Phillips, and W. Perrin Nicolson

Jenkins County Medical Society

President—Austin P. Fortney, Sylvania
Secretary-Treasurer—Cleveland Thompson, Millen
Delegate—H. G. Lee, Millen
Alternate Delegate—William G. Simmons, Sylvania

Randolph-Terrell Medical Society

President—Ernest F. Daniel, Jr., Dawson
Vice-President—Robert B. Martin, III, Cuthbert
Secretary-Treasurer—W. G. Elliott, Cuthbert
Delegate—Robert B. Martin, III, Cuthbert
Alternate Delegate—Robert B. Quattlebaum, Fort Gaines
Censors: J. C. Tidmore, A. R. Sims, and F. S. Rogers

South Georgia Medical Society

Berrien-Clinch-Cook-Echols-Lanier and Lowndes Counties

President—J. R. Smith, Hahira
Vice-President—E. Harry Mixson, Valdosta
Secretary-Treasurer—Jesse Parrott, Hahira
Delegate—A. G. Little, Jr., Valdosta
Alternate Delegate—Fred N. Clements, Adel
Censor—James S. Peters, Jr., Nashville

Whitfield County Medical Society

President—Truman W. Whitfield, Dalton
Vice-President—E. A. Rosen, Dalton
Secretary-Treasurer—H. J. Ault, Dalton
Delegate—G. L. Broadrick, Dalton
Alternate Delegate—Paul L. Bradley, Dalton

Worth County Medical Society

Secretary-Treasurer—Gordon S. Sumner, Sylvester
Delegate—J. L. Tracy, Jr., Sylvester
Alternate Delegate—Henry G. Davis, Jr., Sylvester

VETERANS' NEWS

Veterans Administration in June opened a new 399-bed general medical and surgical hospital in Providence, Rhode Island, bringing the total number of V-A hospitals to 129.

* * *

About 7,227,000 National Service Life Insurance policies, held by World War II veterans, were in force in late Spring, Veterans Administration said. The policies represented \$41.6 billion of insurance protection.

MACON HOTELS

Macon hotels are: Dempsey, Lanier, Central, Southland, Colonial, and Milner. Tourist courts are: Magnolia, and Peach State. The dates of our annual session are April 18-21. Get your reservations now.

THE WOMAN'S AUXILIARY TO THE MEDICAL ASSOCIATION OF GEORGIA



Mrs. J. Harry Rogers
Atlanta
President 1949-1950

INVITATIONS

WOMAN'S AUXILIARY TO THE BIBB COUNTY MEDICAL SOCIETY

To the Members of the Woman's Auxiliary:

On behalf of the Woman's Auxiliary to the Bibb County Medical Society it gives me great pleasure to extend to every member of the Woman's Auxiliary to the Medical Association of Georgia a most cordial invitation to attend the annual state medical convention, which will be held in Macon April 18-21. We are looking forward to having you with us at that time and hope that each of you will make a special effort to be present.

We will be very happy for all doctors' wives who are not members to take part in the convention.

Every doctor's wife has a job to do today that is beyond the routine chores of a housewife. An excellent program has been planned to help each of us do that job better. Our entertainment committee is also hard at work planning many good things for us all.

Each year we enjoy renewing old acquaintances and making new friends. Make your plans now

to help make the 1950 convention in Macon a delightful and interesting occasion.

Sincerely,

MRS. MILFORD B. HATCHER, *President*,
Woman's Auxiliary to the Bibb County
Medical Society

WOMAN'S AUXILIARY TO THE MEDICAL ASSOCIATION OF GEORGIA

Dear Auxiliary Members:

The twenty-fifth convention of the Woman's Auxiliary to the Medical Association of Georgia will be held in Macon April 18-21. As president of the Auxiliary I wish to extend a sincere invitation to every member, as well as to those eligible women who have not yet joined the Auxiliary, to attend this most important meeting.

For this is perhaps the most important one that we have ever held, as we join forces with other similar groups throughout the country in our fight for our way of life. There will be the sociability and fellowship that we always find at our annual meetings, but there will also be that important place reserved in our convention program for the latest information from the Washington scene.

We need each one of you at this our twenty-fifth annual convention. Won't you come?

MRS. J. HARRY ROGERS, *President*,
Woman's Auxiliary to the Medical
Association of Georgia.

PROGRAM

TWENTY-FIFTH ANNUAL CONVENTION WOMAN'S AUXILIARY

to the

MEDICAL ASSOCIATION OF GEORGIA

Macon

APRIL 18-21, 1950

OFFICERS AND COMMITTEES

Executive Board

President—Mrs. J. Harry Rogers, Atlanta.
President-Elect—Mrs. Lehman W. Williams, Savannah.
First Vice-President—Mrs. J. R. Shannon Mays, Macon.
Second Vice-President—Mrs. T. A. Peterson, Savannah.
Third Vice-President—Mrs. Harold Smith, Savannah.
Recording Secretary—Mrs. Leo Smith, Waycross.
Corresponding Secretary—Mrs. D. R. Longino, Atlanta.
Treasurer—Mrs. Robert C. Major, Augusta.
Historian—Mrs. Luther H. Wolff, Columbus.
Parliamentarian—Mrs. Eustace A. Allen, Atlanta.

Advisory Committee

Dr. Murdock Euen, Atlanta, *Chairman*.
Dr. Ralph H. Chaney, Augusta.
Dr. J. Harry Rogers, Atlanta.
Dr. W. G. Elliott, Cuthbert.
Dr. Eustace A. Allen, Atlanta.
Dr. Fullmer Holton, Savannah.
Dr. Thomas Ross, Jr., Macon.
Dr. W. Bruce Schaefer, Toccoa.
Dr. Shelley Davis, Atlanta.

Chairmen of Standing Committees

Organization—Mrs. Lehman H. Williams, Savannah.
Program—Mrs. J. R. Shannon Mays, Macon.
Hygeia—Mrs. T. A. Peterson, Savannah.
Scrapbook—Mrs. Harold M. Smith, Savannah.

Achievement Award—Mrs. Ralph McCord, Rome.
 Archives—Mrs. C. W. Roberts, Atlanta.
 Budget—Mrs. Ralph H. Chaney, Augusta.
 Bulletin—Mrs. William K. Jordan, Macon.
 Camellia Garden—Mrs. T. C. Clodfelter, Milledgeville.
 Doctors' Day—Mrs. Lloyd Wood, Dalton.
 Editorial—Mrs. Ben Hill Clifton, Atlanta.
 Mrs. J. Bonar White Exhibits and Scrapbook Awards
 Mrs. R. K. Winston, Tifton.
 Legislation—Mrs. Marion Estes, Augusta.
 Public Relations—Mrs. Shelley C. Davis, Atlanta.
 Research in Romance of Medicine—Mrs. Wilbur D.
 Hall, Calhoun.
 Revisions—Mrs. Lee Howard, Savannah.
 Student Loan Fund—Mrs. J. Lon King, Macon.
 Mrs. James N. Brawner Trophy—Mrs. Sam Anderson,
 Atlanta.

DISTRICT MANAGERS

First District—Mrs. T. A. Peterson, Savannah.
 Second District—Mrs. Paul Russell, Albany.
 Third District—Mrs. A. R. Sims, Richland.
 Fifth District—Mrs. Murdock Eguen, Atlanta.
 Sixth District—Mrs. J. R. Shannon Mays, Macon.
 Seventh District—Mrs. W. U. Hyden, Summerville.
 Eighth District—Mrs. T. J. Ferrell, Waycross.
 Ninth District—Mrs. C. J. Roper, Jasper.

PRESIDENTS OF COUNTY AUXILIARIES

Baldwin—Mrs. E. W. Allen, Milledgeville.
 Barrow-Jackson—Mrs. Paul Scoggins, Commerce.
 Bibb—Mrs. Milford Hatcher, Macon.
 Bulloch-Candler-Evans—Mrs. J. L. Nevil, Metter.
 Burke-Jenkins-Screven—Mrs. Cleveland Thompson, Mil-
 len.
 Carroll-Douglas-Haralson—Mrs. W. P. Downey, Talla-
 poosa.
 Chatham—Mrs. Joseph Pacific, Savannah.
 Cherokee-Pickens—Mrs. Arthur Hendrix, Canton.
 Cobb—Mrs. W. H. Benson, Marietta.
 Coffee—Mrs. Dan A. Jardine, Douglas.
 Colquitt—Mrs. Edgar Holmes, Moultrie.
 Crisp—Mrs. C. E. McArthur, Cordele.
 Dougherty—Mrs. David Mann, Albany.
 DeKalb—Mrs. G. A. Duncan, Decatur.
 Dodge-Pulaski-Bleckley (Ocmulgee)—Mrs. James W.
 Thomson, Eastman.
 Floyd—Mrs. Warren Gilbert, Rome.
 Fulton—Mrs. Charles Daniel, College Park.
 Gordon—Mrs. J. E. Billings, Calhoun.
 Glynn—Mrs. T. H. Johnston, Brunswick.
 Gwinnett—Mrs. W. J. Hutchins, Buford.
 Habersham—Mrs. J. L. Walker, Clarksville.
 Muscogee—Mrs. James Elkins, Columbus.
 Randolph-Terrell—Mrs. A. R. Sims, Richland.
 Richmond—Mrs. N. M. DeVaughn, Augusta.
 Sumter—Mrs. John H. Robinson, III, Americus.
 Stephens—Mrs. Robert Shiflet, Toccoa.
 Tift—Mrs. R. E. Jones, Tifton.
 Tronp—Mrs. William Hutchinson, LaGrange.
 Ware—Mrs. W. P. Stoner, Waycross.
 Washington—Mrs. J. B. Dillard, Davisboro.
 Whitfield—Mrs. Fred Ragland, Dalton.

PAST PRESIDENTS AND CONVENTIONS

Honorary Presidents for Life—Mrs. James N. Brawner,
 Atlanta, and Mrs. Enstace A. Allen, Atlanta.
 1924—Augusta—(Organization)—Mrs. C. W. Roberts,
 Atlanta, Temporary Chairman.
 1925—Atlanta—Mrs. James N. Brawner, Atlanta.
 1926—Albany—Mrs. William H. Myers, Savannah.
 1927—Athens—Mrs. C. W. Roberts, Atlanta.
 1928—Savannah—Mrs. Paul Holiday, Athens (Mrs. J. C.
 Moore, Gaffney, S. C.)
 1929—Macon—Mrs. Charles Hinton, Macon.
 1930—Augusta—Mrs. Marion T. Benson, Atlanta.
 1931—Macon—Mrs. Charles Harrold, Macon.
 1932—Savannah—Mrs. Ralston Lattimore, Savannah.
 1933—Macon—Mrs. S. T. R. Revell, Louisville.
 1934—Augusta—*Mrs. J. Bonar White, Atlanta.
 1935—Atlanta—Mrs. J. E. Penland, Waycross.
 1936—Savannah—Mrs. Ernest R. Harris, Winder.

1937—Macon—Mrs. William R. Dancy, Savannah.
 1938—Augusta—Mrs. Ralph Chauey, Augusta.
 1939—Atlanta—Mrs. Warren Coleman, Eastman.
 1940—Savannah—Mrs. Eustace A. Allen, Atlanta.
 1941—Macon—Mrs. H. G. Banister, Decatur.
 1942—Augusta—Mrs. Lee Howard, Savannah.
 1943—Atlanta—Mrs. J. Lon King, Macon.
 1944—Savannah—Mrs. Olin S. Cofer, Atlanta.
 1946—Macon—Mrs. W. T. Randolph, Winder.
 1947—Augusta—Mrs. W. Bruce Schaefer, Toccoa.
 1948—Atlanta—Mrs. W. G. Elliott, Cuthbert.
 1949—Savannah—Mrs. Sam Anderson, Atlanta.

*Deceased

WOMAN'S AUXILIARY TO THE BIBB COUNTY MEDICAL SOCIETY COMMITTEES

Credentials and Registration

Mrs. R. W. Richardson,	Mrs. Allan A. Cole
Chairman	Mrs. W. A. Newman
Mrs. Thomas Harrold, Jr.,	Mrs. R. M. Reifler
Co-Chairman	Mrs. Charles T. Rumble
Mrs. Harold C. Atkinson	Mrs. Charles Rey, Jr.
Mrs. John T. DuPree	Mrs. W. P. Smith
Mrs. Earl Lewis	Mrs. R. E. Roberts

Decorations

Mrs. J. L. King, Chairman	Mrs. R. Cullen Goolsby
Mrs. O. R. Thompson,	Mrs. D. T. Henderson
Co-Chairman	Mrs. J. P. Holmes
Mrs. O. F. Keen	Mrs. A. R. Rozar
Mrs. James A. Fountain	Mrs. V. H. McMichael
Mrs. Holloway Bnsh	Mrs. W. A. Williams
Mrs. William L. Barton	Mrs. Joe W. Daniel
Mrs. Charles McLaughlin	Mrs. Fred N. Aldrich
Mrs. W. W. Chrisman	

Reception

Mrs. William Jordan,	Mrs. Leon J. Goodman
Chairman	Mrs. Charles C. Harrold
Mrs. J. R. S. Mays,	Mrs. L. P. James
Co-Chairman	Mrs. Jules Neal
Mrs. J. D. Applewhite	Mrs. Cleveland Thompson
Mrs. Wallace L. Bazemore	Mrs. William C. Sams

Exhibits

Mrs. Willard Golsan,	Mrs. George W. DuPree
Chairman	Mrs. Marvin Harris
Mrs. Alvin Siegel,	
Co-Chairman	

Luncheons

Mrs. T. L. Ross, Jr.,	Mrs. Frank M. Houser
Chairman	Mrs. Edwin Watson
Mrs. Ernest Corn,	Mrs. John Paul Jones
Co-Chairman	Mrs. Edmund A. Branner
Mrs. J. C. Anderson	Mrs. J. W. McFarlane
Mrs. Charles H. Richard-	Mrs. Edgar M. Pope
son, Jr.	Mrs. John Moorman
Mrs. Allan Smith	Mrs. Remer Young Clark

Tea

Mrs. Henry Tift, Chairman	Mrs. William L. Barton
Mrs. Robert McAllister	

Pages

Mrs. J. Emory Clay,	Mrs. Edmund A. Branner
Chairman	Mrs. Charles L. Ridley, Jr.
Mrs. Hall Farmer,	Mrs. E. C. McMillan
Co-Chairman	
Mrs. George A. Billing-	
hurst	

Timekeeper

Mrs. J. D. Applewhite	Mrs. H. G. Weaver
-----------------------	-------------------

Publicity

Mrs. W. D. Hazlehurst,	Mrs. J. C. Anderson,
Chairman	Co-Chairman

Transportation

Mrs. Sam Patton,	Mrs. J. Fletcher Hanson
Chairman	Mrs. R. W. Edenfield
Mrs. L. D. Porch,	Mrs. Sam N. Rubin
Co-Chairman	Mrs. D. D. Walker
Mrs. Sam Work	Mrs. Roland Brown
Mrs. W. C. Boswell	Mrs. W. Devereaux Jarratt
Mrs. Ralph G. Newton	

Banquet

Mrs. Charles J. Woods,	Mrs. William Jordan
Chairman	Mrs. John I. Hall
Mrs. W. W. Baxley,	Mrs. Ben Bashinski
Co-Chairman	Mrs. Max Mass
Mrs. C. H. Richardson, Sr.	Mrs. O. O. Watson
Mrs. C. H. Richardson, Jr.	Mrs. Lee Williams
Mrs. H. G. Weaver	Mrs. Ralph Roberts
Mrs. Walter Mobley	Mrs. Wm. Mark Watkins
Mrs. J. R. S. Mays	Mrs. C. C. Hinton

Arrangements

Mrs. A. M. Phillips Mrs. Milford B. Hatcher

PROGRAM

Headquarters, Hotel Dempsey
Registration
 Tuesday, April 18: 2 P. M. to 6:30 P. M.
 Wednesday, April 19: 9 A. M. to 12:30 P. M., 2 P. M. to 4 P. M.
 Thursday, April 20: 9 A. M. to 12:30 P. M.
Program and Entertainment
 Tuesday, April 18: 3 P. M.—Executive Board Meeting.
 Tuesday, April 18: 8 P. M.—Report from President of Woman's Auxiliary to House of Delegates of Medical Association of Georgia.
 Tuesday, April 18: 9-11 P. M.—Reception at the Sidney Lanier Cottage, 935 High St., Given by the Bibb County Medical Society for all members of the Medical Association, their wives, and guests.
 Wednesday, April 19: 10 A. M. to 12:30 P. M.—General Meeting.
 Wednesday, April 19: 1 P. M.—Luncheon at Wesleyan College honoring Mrs. David B. Allman, president of the Woman's Auxiliary to the American Medical Association, and Mrs. J. Harry Rogers, president of the Woman's Auxiliary to the Medical Association of Georgia.
 Wednesday, April 19: 4 P. M. to 5:30 P. M.—Tea at the home of Mrs. Henry H. Tift, 420 Nottingham Drive. Given by Woman's Auxiliary to the Bibb County Medical Society.
 Wednesday, April 19: 8 P. M.—Public Meeting, Medical Association of Georgia.
 Thursday, April 20: 10 A. M. to 12:30 P. M.—General Meeting.
 Thursday, April 20: 7:30 P. M.—Joint banquet at Idle Hour Country Club. All members of Medical Association and their wives are invited.
 Post-convention Board Meeting.

GENERAL MEETING

Hotel Dempsey

Wednesday, April 19, 10:00 A. M.

Call to Order by the President, Mrs. J. Harry Rogers, Atlanta.

Invocation

The Rev. Tracy Lamar, Macon, Rector St. James Episcopal Church.

Pledge of Loyalty

Mrs. Sam Anderson, Atlanta.

Address of Welcome

Mrs. Milford B. Hatcher, Macon, President Woman's Auxiliary to the Bibb County Medical Society.

Response to Address of Welcome

Mrs. W. H. Benson, Marietta.

Introduction Officers and Distinguished Guests

Mrs. J. Lon King, Macon.

Roll Call of Districts and Counties

Mrs. Leo Smith, Waycross, Secretary

Address "Our Present Situation"

Dr. Enoch Callaway, LaGrange, President Medical Association of Georgia

Address "Public Relations"

Mr. Ed Bridges, Public Relations Director, Medical Association of Georgia

Rules Governing Convention Procedure

Mrs. Eustace A. Allen, Atlanta, Parliamentarian.

Report from Executive Committee

Mrs. J. Harry Rogers, Atlanta, President.

Introduction of Pages

Mrs. J. Emory Clay, Macon.

Address

Mrs. David B. Allman, Atlantic City, N. J., President Woman's Auxiliary to the American Medical Association.

Memorial Service

Mrs. Ernest R. Harris, Winder, chairman; Mrs. C. H. Richardson, Macon, co-chairman.

Reports District Managers and County Presidents

Reports of Registration Committee

Mrs. Rhea W. Richardson, Macon.

Reports of Entertainment Committee

Mrs. A. M. Phillips, Macon, General Chairman.

Report Convention Woman's Auxiliary to American Medical Association.

Mrs. Allen Bunce, Atlanta.

Business

Reading of Minutes

Adjournment

GENERAL MEETING

Hotel Dempsey

Thursday, April 20, 1950, 10:00 A. M.

Call to Order by the President, Mrs. J. Harry Rogers, Atlanta.

Invocation

Dr. William E. Denham, Pastor First Baptist Church.

Pledge of Loyalty

Mrs. W. G. Elliott, Cuthbert.

Response

Mrs. Robert E. Jones, Tifton.

Address

Dr. A. M. Phillips, Macon, President-Elect of the Medical Association of Georgia.

Report of Advisory Committee to Woman's Auxiliary of the Medical Association of Georgia

Dr. Murdock Euen, Atlanta, chairman.

Address

Mrs. W. Bruce Schaefer, Toccoa, Chairman Legislation, Woman's Auxiliary to the American Medical Association.

Address

Mrs. R. C. Haynes, Marshall, Mo., President Woman's Auxiliary to Southern Medical Association.

Report Convention Woman's Auxiliary to Southern Medical Association

Mrs. John W. Turner, Atlanta

Reports of Officers

Reports of Auditing Committee

Reports of Resolutions Committee

Reports of Awards Committee

Mrs. Sam Anderson, Atlanta; Mrs. Ralph McCord, Rome; Mrs. Richard Winston, Tifton.

Report of Courtesy Committee

Business

Report of Nominating Committee

Election of Officers

Installation of Officers

Mrs. Ralph H. Chaney, Augusta

Presentation President's Pin to Retiring President

Mrs. Joseph Yampolsky, Atlanta.

Announcements by the President

Mrs. L. W. Williams.

Adjournment.

POST CONVENTION BOARD MEETING

Mrs. L. W. Williams, Savannah.

RULES TO GOVERN THE CONVENTION

1. To gain recognition, a delegate is requested to rise, address the chair, give her name and the name of her auxiliary.

2. No delegate shall speak more than twice on the same subject, and is limited to two minutes each time.

3. Reports shall not be read from Auxiliaries which are not represented by delegates but shall be filed with the secretary.

4. All original motions on resolutions shall be made by submitting two copies; one to the Resolutions Committee, and one to the Recording Secretary.

5. Reports of delegates and district managers are limited to two minutes.

6. No one is entitled to vote before she is registered.

7. All persons appearing on the program must be seated near the platform when the session opens.

8. Badges must be worn by members of the voting body during all general sessions of the convention.

9. Delegates' privileges are not transferable.

Whispering conversations greatly retard the business of the meeting; order must be maintained at all times. Please be prompt. Meetings will begin promptly at the time announced. Reports must conform to the time allotted.

PLEDGE

"I pledge my loyalty and devotion to the 'WOMAN'S AUXILIARY TO THE MEDICAL ASSOCIATION OF GEORGIA.' I will support its activities, protect its reputation, and ever sustain its high ideals.

COLLECT

"Keep us, O God, from pettiness; let us be large in thought, word and deed. Let us be done with fault-finding, and leave off self-seeking. May we put away pretense, and meet each other face to face, without self-pity and without prejudice.

May we never be hasty in judgment, and always generous. Let us take time for all things; make us to grow calm, serene, gentle.

Teach us to put into action our better impulses, straightforward and unafraid. Grant that we may realize it is the little things that create differences; but in the big things of life we are one.

And may we strive to teach and to know the great, common Woman's heart of us all, and O, Lord God, let us not forget to be kind."

TREAT BLOOD CLOT IN BRAIN BY BLOCKING NERVE PATHWAY

Doctors have devised a promising treatment for a clot in a blood vessel of the brain, according to a report in the January 7 *Journal of the American Medical Association*.

Until recently treatment of the condition, acute cerebral thrombosis and embolism, was confined to general measures such as administering intravenous fluid or giving whisky.

The new technic, known as stellate ganglion block, is reported by Drs. Edwin W. Ayres and Seymour M. Perry of the College of Medical Evangelists and University of Southern California School of Medicine, Los Angeles.

It involves blocking certain nerve pathways to vessels which supply the brain. This is done by injecting procaine hydrochloride, a pain-killing drug, in nerve pathways at the back of the neck. The procedure tends to increase the blood supply to the part of the brain that has been affected by the clot.

Of the 44 patients treated, 23 showed improvement in 15 minutes to an hour after the first injection was given.

The doctors noted increased alertness, greater ability to move, improved speech and better comprehension.

Improvement occurred in nine of 10 cases who received the treatment in the first six hours after the onset of symptoms, the doctors say.

REPORT NEW SURGERY TO SAVE CHILDREN FROM FATAL DISEASE OF PANCREAS

A new surgical procedure to save the lives of children afflicted with a hitherto uniformly fatal disease of the pancreas has been devised by three New Orleans doctors.

The operation, splanchnicectomy, involves cutting certain nerves just below the diaphragm. It is performed in conjunction with blocking of nerves in the same area by injection of procaine hydrochloride, a pain-killing drug.

The doctors are William B. Ayers, Daniel Stowens and Alton Ochsner of Tulane University School of Medicine and the Ochsner Clinic. They report the procedure in the January 7 *Journal of the American Medical Association*.

The disease, characterized by formation of fibrous material in the pancreas, was first recognized in 1933, according to the doctors. Babies suffering from the disease characteristically develop pneumonia or other respiratory conditions at an early age. Nutritive difficulties in babies also are characteristic.

A 17-month-old girl, identified only as G. G., had pneumonia at five months of age and during the following year had two severe infections of the upper part of the respiratory tract, the doctors say. She grew slowly and had a persistent cough.

After the operation and nerve block were performed, her appetite and general appearance improved and her difficulty in breathing disappeared. She was discharged from the hospital free of symptoms.

Three other children with the disease on whom the doctors performed the surgery and nerve block responded in a similar manner. A fifth child died of heart failure during the surgery.

ATTRIBUTE BALDNESS IN WOMEN TO METAL CURLERS, TIGHT BRAIDS

Women who consistently use metal curlers on their hair or wear it in tight braids may develop bald spots above the ears, according to three Los Angeles doctors.

Drs. Samuel Ayres Jr., Samuel Ayres III and Joseph I. Mirovich report five cases of such baldness in the December 1949 *Archives of Dermatology and Syphilology*, published by the American Medical Association.

Three of the women had been using metal curlers and two had been wearing their hair pulled away from the ears and braided tightly.

VETERANS' NEWS

Less than one-fourth of the World War II veterans holding National Service Life Insurance have converted their policies from term insurance to one or more of the half-dozen available permanent plans, Veterans Administration disclosed.

* * *

More than 202,000 World War II veterans by June 1 had either exhausted their entitlement to G.I. Bill training, or had completed their Public Law 16 training and were declared rehabilitated, Veterans Administration said.

* * *

The number of World War II veterans training on-the-job under the G. I. Bill and Public Law 16 dropped to 403,135 on June 1—a 45 per cent decrease from the 720,510 peak reached in January, 1947.

* * *

World War II veterans between 25 and 34 years of age had a median income of \$2,401 in 1947, compared with \$2,585 for non-veterans in the same age group, according to a Census Bureau study.

The Medical Association of Georgia will hold its 1950 annual session in Macon, April 18-21.

THE JOURNAL

OF THE

MEDICAL ASSOCIATION OF GEORGIA

PUBLISHED MONTHLY under direction of the Council

Vol. XXXIX—No. 4

Atlanta, Georgia, April, 1950

No. 4

NECK DISSECTIONS

MILFORD B. HATCHER, M.D.
Macon

Neck dissections, like all surgery, may be simple or they may be more difficult depending upon the type and nature of the lesion and the location. In all surgery it is essential to have a working knowledge of anatomy, but in the field of neck surgery it is imperative to have mastered the anatomy of that region. It is also a basic requirement to be familiar with the embryologic development of the structures in the head and neck. In this paper no attempt will be made to discuss either the anatomy or the embryology. The approach will be made from the clinical viewpoint, and from that phase one asks the question, When is a neck dissection indicated? A dissection is indicated when there is a tumefaction either palpable or plainly visible or when other signs and symptoms demonstrate an abnormal process amenable to surgery unless there are distinct contraindications, which will be discussed later.

Please allow me to beg here that one not take neck dissections too lightly or feel that they can be shelled out in a haphazard or matter-of-fact manner. True, some are very simple; however, some that appear simple may run into difficult situations if precautions are not taken. They should not be considered an office procedure.

In this paper I will not attempt to discuss neck dissections for conditions such as cer-

vical rib, scalenus anticus syndrome, or esophageal diverticulum.

To aid in having an accurate preoperative diagnosis, swellings in the neck have been divided into two main classifications: (1) those in the midline, and (2) those in the lateral positions. Midline swellings may be divided into: (a) thyroglossal duct cyst or sinus; (b) lingual goiter (removal of which often causes myxedema if normal thyroid tissue is not present; so when one removes a lingual goiter it is necessary to explore the thyroid area to be sure the normal thyroid is present); (c) sebaceous cyst or cyst of the isthmus of the thyroid, and (d) ranula.

Swellings of the lateral portions of the neck can be divided into the following classifications: (a) salivary; (b) hygroma; (c) branchial cleft cyst (or sinus); (d) dermoid; (e) venous hemangioma; (f) thyroid enlargement (hyperthyroidism included); (g) neurofibroma; (h) adenoma or tumor of the parathyroids; (i) Hodgkin's disease; (j) lymphosarcoma; (k) leukemic adenitis; (l) sarcoid; (m) tuberculous adenitis; (n) carotid body tumors; (o) so-called lateral "aberrant" thyroid; (p) epidermoid carcinomas (lympho-epithelioma or transitional-cell carcinomas); and (q) cervical metastasis. Generally speaking, we might state that all midline tumors and A through parathyroid tumors require only careful surgical dissection; Hodgkin's disease through tuberculous adenitis are medical problems from a treatment standpoint and are mentioned here only to be used from a differential point of view before any surgery is done except biopsy. Later in

the paper I will discuss the lateral "aberrant" thyroid.

Carotid body tumors deserve special mention due to the fact that the actual treatment of them depends upon the findings at operation; that is, whether the carotids are involved and whether the frozen section demonstrates benign or malignant changes. The general concensus of opinion appears to be that if they are too difficult to remove and show only benign changes that it is best to leave them and not attempt a resection which would necessitate ligation of the common carotid vessels.

The epidermoid carcinomas of the mouth and pharynx are a group of highly anaplastic, radio-sensitive malignancies which is characterized by an inconspicuous primary lesion with massive involvement of the regional and distant lymph nodes with the formation of visceral metastases. Irradiation is the therapy of choice.

The last on our list, cervical metastasis, is the one which will be discussed most in detail in this paper. Treatment of the primary cancerous lesion of the head and neck has advanced so much that death due to metastasis is now of the greatest concern. Adequate follow-up and proper consideration of the metastatic involvement cannot be too strongly stressed. With the exception of the thyroid and melanomas, most cancers of the head and neck confine their metastatic activity to the lymphatic pathways. Because of this preponderance of lymphatic metastasis, most of the head and neck metastasis is confined above the clavicle until late. Braund and Martin¹ in a review of autopsies of patients who died of head and neck cancers found only 23 per cent of the metastases were found below the clavicle. Slaughter² states that the spread is generally unilateral unless late, and the cervical nodes are blocked on one side, causing a reverse of lymphatic flow; or else the primary lesion extends across the midline. Although clin-

ically it may not be apparent, a group of nodes rather than one node is usually involved when the metastatic lesion is detected. This was apparently what made Brown et al³ state that block surgical excision of the lymphatic tissues in the neck would probably cure more patients with metastatic carcinoma ending in this area than any other procedure at the present time.

It must be admitted that the advisability of when to do neck dissections can be a debatable question, and there are excellent opinions on both sides: Blair, Brown, and Byars⁴ advocate neck dissections as soon as possible on patients with intraoral cancer, whether the neck nodes are palpable or not. Kennedy⁵ concurs with this and even feels that a suprahyoid dissection should be done at the time the lip lesion is excised. Martin⁶ does not support this view and has even shown that cure rates in patients without demonstrable metastases are approximately the same whether or not neck dissection is done. The problem then arises as to when to do neck dissections for cancer. The following generalizations are given:

Indications: (1) The primary lesion is controlled; (2) The primary lesion is limited to one side of the oral cavity; (3) The primary lesion is shown to be of highly differentiated cells; (4) Cervical metastases are present and limited to one group of nodes or nodes in two contiguous sets of triangles; (5) Nodes are movable and discrete; (6) Opposite side of neck is free of metastasis; (7) No distant metastasis is present; and (8) The patient is in good general condition.

Contraindications: (1) The primary lesion is uncontrolled; (2) The primary lesion extends to or beyond the midline of the oral cavity; (3) The primary lesion is shown to be of undifferentiated cell type; (4) No metastatic nodes are present; (5) The involved nodes are fixed or matted together; (6) Contralateral or bilateral cer-

vical metastases are present; (7) Distant metastases are present; and (8) The patient is in poor general condition.

After the decision has been made to do a neck dissection, the question arises as to when is the optimum time. Here again only generalized facts can be stated. The primary lesion should be under control, and several weeks should elapse before the primary treatment and the neck dissection are performed, on the theoretical grounds that this interval would allow cells loose in the regional lymphatics time to reach the regional nodes. Ideally, it would be good if we could do a complete excision and dissection in continuity as in breast cancer, but it cannot often be done in neck surgery. This is practically impossible. Occasionally this is necessary and done when we perform a "Commando procedure", such as removing a section of the jaw combined with a radical neck.

For the most part we use two types of neck dissections, the supraomohyoid dissection and the radical or complete neck dissection. The supraomohyoid dissection is used generally: (1) when only one node is detected high in the neck; (2) when one side has had a radical and a gland is felt high on the other side; or (3) when the lesion extends slightly across the midline, seen at times in a lip lesion. It is my feeling that when a single dissection is done a radical procedure is the one of choice. Generally speaking, it is a formidable procedure, but actually the mortality is low,⁷ given by some between 1 and 4 per cent, and the resultant defect in appearance and function is small.

Dissection is done through a Y-shaped incision with the long limb over the anterior border of the sternomastoid muscle and the short limb toward the hyoid bone. The block excised contains the subcutaneous tissue and fascia, the platysma, the sternomastoid, internal jugular vein, submaxillary

gland, tip of the parotid gland, and the enclosed lymphatics and other tissues. The dissection extends internally down to the anterior scalene, levator scapuli, trapezius, and the myohyoid muscles. The carotid arteries, vagus nerve, hypoglossal nerve, phrenic, and spinal accessory nerves should be saved by careful dissection, except in certain cases in which the metastasis has extended to involve these structures.

The area dissected is further bordered by the trapezius muscle inferiorly across the top of the clavicle and manubrium of the sternum and anteriorly to the thyroid, above along the ribbon muscles to the hyoid, across the midline to the opposite point of the chin. The skin flaps are closed with drainage, and a light pressure dressing of mechanic's waste is applied.

There is one condition necessitating a radical neck dissection which requires special consideration; that is, malignancy of the thyroid, as this tends to metastasize both by veins and lymphatics. The dissection of the submaxillary triangle may be omitted, but the entire thyroid on the affected side with the isthmus and a subtotal thyroidectomy on the opposite side should be included. Contrary to neck dissections for epidermoid carcinoma, radical thyroidectomy should be followed by x-ray irradiation to the thyroid area and neck.

I wish to call to your attention the so-called lateral "aberrant" thyroid tumors, which tend to occur in a younger age group than does cancer in general or than does thyroid disease. The presenting finding is usually a swelling or nodule in the lateral side of the neck, and the disease often recurs locally unless complete eradication is performed by surgery. The consensus of opinion at the present time appears to be that if the mass along with the lobe of the thyroid on that side is removed that the condition will be cured and that in the majority of

cases there is a metastasis from the lobe of the thyroid on that side of the cervical glands. In a large percent of these cases the "mother tumor" is beyond clinical recognition but has to be picked up by very careful microscopic examination. As these tumors are slow-growing anyhow, follow-up examinations must be made over decades rather than years.

We are all interested in what disability or disturbance of function to expect after carrying out the above-mentioned radical procedures. Surprisingly, they are small. Probably the most common one is a slight weakness of the lower lip due to injury of the lowest branch of the facial nerve and a shoulder drop due to injury or severance of the eleventh nerve. Accidents to the recurrent laryngeal, vagus, phrenic, hypoglossal, and lingual nerves do occur but should for the most part be avoided. Clinically, removal of the sternomastoid, omohyoid, and ribbon muscles has little functional effect.

Summary

Neck dissections may be simple or more difficult depending upon the type and nature of the lesion and the location. For diagnosis, lesions are divided into two main groups, midline and lateral. From a treatment angle dissections are classified as simple dissection, diagnostic (biopsy), and radical. Special consideration should be given to dissections for carotid body tumors, lateral "aberrant" thyroid tumors, and thyroid malignancies. The indications and contraindications for neck dissections due to cancer are given. The disability or disturbance of function and appearance is surprisingly small.

BIBLIOGRAPHY

1. Braund, Ralph R., and Martin, Hayes E.: Distant Metastasis in Cancer of the Upper Respiratory and Alimentary Tracts, Surg., Gynec. & Obst. 73: 63-71 (July) 1941.
2. Cole, W. H.; Slaughter, D. P., and Rossiter, L.: Potential Dangers of the Non-toxic Nodular Goiter, J.A.M.A. 127: 14 (April 7) 1945.
3. Brown, J. B., and McDowell, F.: Neck Dissections for Metastatic Carcinoma, Surg., Gynec. & Obst. 79: 115 (Aug.) 1944.
4. Blair, Vilray P.; Brown, J. B., and Byars, L. T.: Our Responsibility Toward Oral Cancer, Ann. Surg. 106: 568-576 (Oct.) 1937.
5. Kennedy, R. H.: Epithelioma of the Lower Lip, Ann. Surg. 106: 577-583 (Oct.) 1937.

6. Martin, Hayes E.: The Treatment of Cervical Metastatic Cancer, Ann. Surg. 114: 972-986 (Dec.) 1941.

7. Taylor, G. W.: Evaluation of Regional Lymph Node Dissection in the Treatment of Carcinoma, New England J. Med. 226: 367 (March 5) 1942.

PILONIDAL CYST AND SINUS

A Simple, Ambulatory Surgical Treatment

NEEDHAM B. BATEMAN, M.D.

WILLIAM H. BATEMAN, M.D.

GREGORY W. BATEMAN, M.D.

and

JOSEPH D. WODDAIL, M.D.

Atlanta

For the sake of brevity reference will not be made to the etiology, incidence, pathology, symptoms and diagnosis of this condition inasmuch as excellent descriptions and discussions of these phases are abundantly available in the current literature.

Treatment for this condition is surgical and must include the care of the acutely infected or abscessed pilonidal cyst or sinus and the chronically infected or quiescent lesion. In years gone by, especially before the availability of the sulfa drugs and penicillin, the abscessed sinus or cyst would be incised and drains inserted. A period of varying length passed during which the patient had repeated dressings, hospital or office care, and usually did not engage in his regular occupation to the fullest extent. Both the patient and the doctor were waiting and working for the time that the necessary surgery could be done to effect a cure. Not infrequently the area would abscess repeatedly before the surgeon could bring about sufficient improvement to justify complete excision. This delay and treatment was a great handicap to the patient, as well as disturbing to the employer, and undesirable to the attending physician.

Therefore it becomes apparent that a simple operation that can be used in the case of pilonidal disease, regardless of its

state of infection, would be most desirable to all concerned. On reviewing the literature and the results of over 800 personal cases it becomes evident that really only two methods of treatment exist; namely, (1) surgical removal and suturing or closed method; (2) surgical removal and packing or open method. Of course numerous surgeons have recommended and used modifications of these two methods with varying statistical results. The advocates of the closed methods have claimed anywhere from 45 to 92 per cent healing by primary intention. They also list recurrences varying from 12 to 37 per cent. These surgeons claim shorter hospitalization and more comfortable scars for the closed method. On the other hand, advocates of the open method claim to have reduced recurrences to as low as 3 per cent. In a few words, an uncomplicated operation suitable for any case of pilonidal sinus or cyst that will enable the operator to (1) reduce recurrences to a minimum; (2) return the patient to ambulation and employment in the shortest possible time; (3) give the patient a comfortable scar when healed and (4) involve very little if any discomfort to the patient, is the operation to be desired. Such an operative procedure is to be herein described.

If the patient does not have an abscess or is not acutely infected he is given a preliminary examination to rule out the presence of any disease or condition that will inhibit or retard natural healing. If he shows any of the gross signs of inadequate nutrition these are called to his attention. He is then given a balanced diet list along with instructions to correct any nutritional defects, as well as advised to secure necessary dental repair and obtain adequate sleep, and exercise. He is also given multiple vitamin capsules in the maximum dose. If possible a period of six to twelve weeks is allowed to enable the patient to reach the peak of nor-

mal nutrition. As these patients feel better, and it is explained to them that all of these things are being done to increase their comfort and shorten their healing time following operation, it is remarkable how fully they cooperate. On the other hand if the patient does have abscess or is acutely inflamed, or for some other reason cannot wait for the usual preparation, operation is advised immediately. In the case of abscess the top of the abscessed cavity as well as the top of any ramifying portions of the sinus are excised leaving the posterior wall of the abscessed cavity or sinus. Since the cyst lining is epithelial and exposure to the surface causes it to lose its secretory function it is well to preserve this tissue when it is found practical to do so. This is a modification of the marsupialization operation as performed by Buie and others. However, less than 10 per cent of the patients seen in private practice suffering from pilonidal disease are such that any part of the cyst wall can be safely left in. Therefore the entire cyst or sinus is excised in over 90 per cent of the cases. Dye is not used since it only makes more difficult the identification of the tissue to be removed. The skin edges are sutured with continuous silk or cotton, kept taut so as to control skin and subcutaneous bleeding, and other bleeders are ligated with plain catgut. The cavity is packed loosely with fine mesh gauze, the gauze sprinkled generously with sulfa crystals, and a large dressing is applied with adhesive. The patient is allowed out of bed in three to six hours depending on the type of anesthetic he has had. General diet and multiple vitamin therapy are resumed as soon as tolerated. At the end of 72 hours Sitz baths are started. If possible the patient is allowed to sit in plain hot water for $\frac{1}{2}$ hour three to four times daily. If the patient experiences much pain, as is sometimes the case where there was an abscess

or acute infection, heat is applied between baths with an infra-red lamp and wet dressing of tyrothricin, 1:5000, is kept in place throughout the night until the infection is completely controlled. The patient is allowed to leave the hospital between the fourth and sixth postoperative days. He continues his treatment at home, using a simple T binder made from two or three inch gauze bandage to hold his dressing in place. He may resume light duty in five to eight days postoperatively, and is usually healed completely and ready for his usual work in 15 to 20 days postoperatively. Until completely healed he comes to the office twice each week in order that his progress may be checked.

The end result leaves very little scar as you will see from the postoperative photos on the slides to follow. This is due mainly to three things; namely, (1) the removal of only the minimal amount of tissue and skin; (2) sharp dissection and keeping tissue damage to a minimum; and (3) proper nutritional state of the patient. The granulating incision having been kept healthy the skin edges grow out to meet thereby reducing the width of the strip of scar tissue on the surface when it is healed.

Conclusions

1. This simple procedure is suited to all cases of pilonidal disease, both acutely infected or abscessed and quiescent.
2. It reduces recurrences to a minimum.
3. Hospital care is greatly shortened, and the patient is ambulatory.
4. There is little discomfort to the patient, and postoperative care is simplified.
5. A comfortable scar results.
6. Loss of time from work is markedly reduced.
7. The patient's general health is benefited by the preoperative and postoperative treatment he receives.
8. This procedure is easily carried out

by any surgeon even if he sees comparatively few such cases.

REFERENCES

1. Ziegler, Hrolfe R.; Murphy, David R., Jr., and Meek, Edwin M.: Pilonidal Cyst and Sinus, *Surgery* 20: 690-103 (July-Dec.) 1946.
2. Emery, Fredric B.: The Surgical Treatment of Pilonidal Cyst and Sinuses, *J. Kansas M. Soc.* 209: 218-219, 1948.
3. Behrend, Albert: The Surgical Treatment of Chronic Infected Pilonidal Sinus, *S. Clin. North America*, 10: 1507 (Nov.) 1946.
4. Rosser, Curtis, and Kerr, Jack G.: Pilonidal Disease—Present Status of Management, *J.A.M.A.* 133-13-1003 (April) 1947.
5. Roddenberry, S. A., and Rizzuto, M. P.: Observations on the Effects of Tyrothricin in Postoperative Pilonidal Cyst Wounds, *Ann. Int. Med.* 27: 106-110 (July) 1947.
6. Buie, L. A.: Jeep Disease (Pilonidal Disease of Mechanized Warfare) *South. M. J.* 37: 103-109, 1944.

GASTRO-INTESTINAL ALLERGY IN CHILDREN

HAROLD W. MUECKE, M.D.

Waycross

The purpose of this discussion is to consider some of the gastro-intestinal allergic manifestations in children and to suggest their relationship and similarity to certain symptoms which occur in adults and which are not generally considered as having an allergic basis. In this brief discussion no attempt will be made to consider extra-gastro-intestinal allergic signs and symptoms, such as angioneurotic edema, urticaria, eczema, migraine, allergic rhinitis, asthma, and so forth, any one of which may result from the ingestion of food to which the individual is over-sensitive; but only evidences of local allergic irritation to the gastro-intestinal tract will be taken up.

Gastric Manifestations

Not infrequently one sees infants who begin to vomit as soon as they take food (breast milk). Others may take breast milk well and begin to vomit when cow's milk is begun. Still others do well on milk and begin to vomit only when other articles of food are added to their diet, such as eggs, orange juice, chocolate, nuts, and so forth. In other words, one may encounter allergic vomiting at any stage of childhood, depending upon when the exciting substance which

is responsible for the symptoms of vomiting becomes a part of the diet. I do not mean to give the impression that vomiting is a very common symptom of allergy, or that allergy figures very prominently as a cause when we consider all the vomiting that occurs in children. Just as allergy produces many symptoms other than vomiting, so vomiting has many causes other than allergy. The point is that when allergy is the cause of vomiting, the vomiting tends to be of a persistent nature and no relief is obtained unless the causative factor is recognized and removed completely or unless chance removes the cause for us, which not infrequently happens.

The earliest type of allergic vomiting which we see is that in small infants which begins when the infant first takes food, or soon after. In these infants hypertrophic stenosis of the pylorus is nearly always thought to be the cause of the vomiting. And, of course, probably in the majority of instances of persistent vomiting at this period, it is the cause. However, I have seen a number of infants with early persistent vomiting whose condition had been diagnosed hypertrophic stenosis of the pylorus but whose symptoms were relieved only when it was found that they were sensitive to milk and when the cause of the trouble was removed. I also know of five infants who were operated on in various hospitals for hypertrophic stenosis of the pylorus, but were found to have no hypertrophy. Later their symptoms were relieved when the allergic nature of the condition was discovered and the causative factor was removed.

A few months further up the scale of infancy we not infrequently encounter vomiting when new articles of food are added to the diet. This of course does not necessarily mean that the child is over-sensitive to the new food unless the vomiting occurs each time the food is given, and even then one looks for additional evidence to prove aller-

gy is the cause. A family history of allergy in the mother, in the father, or in both is usually present when the infant presents this particular symptom of allergy. A positive skin test to an extract of the food is usually present. This, however, is not always so, just as in adults. Other allergic manifestations in the patient such as urticaria or eczema should be sought for, but such skin manifestations do not usually occur coincidentally with the gastro-intestinal manifestations of allergy. In older children one may get a history of previous skin manifestations. Finally, strong supporting evidence of the true nature of the condition is obtained if there is a cessation of symptoms upon eliminating the suspected food from the diet, and if there is a recurrence of symptoms when the food is again added to the diet. Unfortunately, the situation not infrequently is complicated by the fact that there is in the diet more than one food to which the child is sensitive.

It is usually later on in childhood that we meet the familiar condition called cyclic or recurrent vomiting. Attacks of cyclic or recurrent vomiting may not always be due to allergy, but I have had occasion in the case of several children to prove their allergic basis. For example, one 10-year-old girl had had a number of attacks of cyclic vomiting. She was found to be skin sensitive to milk. As long as milk and milk products were left out of the diet there was no trouble. Another child had attacks once a year when he went to the circus. The attacks were attributed to excitement and exhaustion, but on further questioning it was found that he ate peanuts only during his visit to the circus, and when tested to peanuts he was found to be sensitive. The parents doubted the validity of our suggestion that peanuts were responsible for his trouble and somewhat later gave him peanuts. A severe attack followed. By accident the experiment was repeated several times with the same results.

There is further evidence and support of the allergic nature of cyclic vomiting in that a number of the adults who suffer with migraine give a history of cyclic vomiting during childhood. This, of course, presumes that migraine is an allergic manifestation.

Intestinal Manifestations

Again, early in infancy one sees children who do not vomit, but who have severe intestinal symptoms, such as colic, frequent bowel movements containing mucus, and the passage of a great deal of gas by bowel. The frequent movements are not watery as in diarrhea, but are soft, are apt to be small, and nearly always contain mucus. The colic mentioned here is genuine colic and not mere hunger pains which so frequently are called colic. This type of manifestation is similar to much of the mucous colitis of adults. In children, however, one seldom sees the spastic type of colitis. These children gain weight well and develop well if given an adequate amount of food, but almost run the family crazy until relief from their pain is obtained by finding the cause of their trouble and removing it. As opposed to other children who may temporarily have similar symptoms due to other causes, these small infants are not ill but are merely very uncomfortable. The allergic nature of this condition is readily suspected if one has had previous experience with such infants, but proof of the diagnosis is to be obtained only by more or less the same methods as those indicated above in connection with vomiting. Symptoms like these may occur during any stage of childhood and even in adults. For example, a small child who had suffered for two months with the above-mentioned symptoms was found to be sensitive to milk and was completely relieved when he was placed on a dried milk preparation which of course had been heated. Various fresh milk preparations had been tried with no benefit. The

probable explanation of the relief which these children often get when placed on a milk preparation which has been subjected to prolonged heating is that there are two factors in milk to which they may become sensitive and one is apparently heat labile. This is the explanation offered in 1932 by Lewis and Hayden and which has stood the test of time. Another older child (12 years of age) passed a great deal of gas, had soft bowel movements containing much mucus, and had colicky pains in the abdomen. He was found to be sensitive to chocolate and on repeated occasions later his symptoms recurred following the ingestion of chocolate. Still another patient (an adult) who had complained of marked abdominal pain for three years, and for a year had had typical severe mucous colitis symptoms, was found to be sensitive to milk and on removal of the milk and all milk products from his diet all symptoms disappeared and his weight rapidly rose from 130 to 200 pounds. He was six feet two inches tall, very much under weight and had made milk and various milk drinks a constant part of his diet for the purpose of improving his physical condition. Probably because of the constant presence of milk in his diet he had become suspicious of the bad effects of almost everything he ate. On two occasions later the unintentional addition of milk products (frozen custard and Swiss cheese) to his diet resulted in the recurrence of a marked degree of his previous symptoms.

There is another group of individuals whose symptoms probably come from intestinal irritation, in whom abdominal discomfort is the chief complaint. Their symptoms in general are similar to those of the group described above except that the bowel movements as a rule are not frequent. Some of these individuals are indeed constipated. The members of this group are usually older children and adults. The symptoms in certain cases have been repeatedly produced

by giving to the patients food to which they are sensitive. In some instances there is dull pain, and in others sharp cramp-like pain. For example, one boy who had had attacks of cyclic vomiting for several years began to have abdominal discomfort later which prevented his sleeping and caused him trouble during most of the day from time-to-time. These latter symptoms had continued for three or four years when we first saw the boy and found him to be sensitive to chocolate and tomatoes. These two articles of food were removed from his diet following which there was complete relief from discomfort and a gain of 10 pounds in weight during the next month. While I have had no opportunity to prove the presence of spasm of the intestine in these cases, its occurrence is suggested by the fact that relief of symptoms sometimes results from the administration of atropine. There is much reason also to believe that the enterospasm, which is sometimes the only finding when the abdomen is explored surgically for appendicitis or intestinal obstruction, is of this nature. In some cases the severe pain followed some time later by vomiting might quite naturally suggest intestinal obstruction. Relief has been obtained in just this type of patient from the administration of atropine. I recognize the danger of assuming that symptoms like these have an allergic basis, and of course one should never make this assumption except as a last resort because of the great danger of missing other abdominal conditions with like symptoms which produce more serious consequences if the surgeon does not intervene. However, repeated attacks of this type not localized to the appendix region, associated with eating of certain foods and occurring in a patient with a personal or family history of allergy, should always be suggestive of an allergic etiology. In many instances the confirmation of positive skin tests may be obtained.

Treatment

After one finds the food or foods which are responsible for the allergic symptoms, treatment consists of removing the offending foods from the diet, or of modifying the food so that it will not cause symptoms, or of modifying the patient's response to the food. For example, if a patient is found to be sensitive to chocolate it is not difficult to eliminate chocolate from the diet. Elimination of the offending food, if this is possible, is the most simple method of treatment and produces the most clear-cut results. However, if a small infant whose sole article of diet is milk is sensitive to that milk, then elimination is difficult. In this case it has been found that cow's milk that has been subjected to varying degrees of heat, such as dried milk or evaporated milk, may be taken without producing symptoms, when fresh milk cannot be tolerated. One of the factors in cow's milk to which children often become sensitive can be completely or partially destroyed by heat. If this modification of milk does not result in relief of symptoms it then becomes necessary, if the symptoms are severe enough, to change to some other food, such as goat's milk or in some instances to soy bean preparations.

In older children where there is sensitivity to several foods, and elimination would unduly restrict the diet, the patient's response to these foods usually can be modified through a process of what one may call desensitization. Patients themselves have a tendency to carry out this desensitization through repeatedly taking the foods to which they are sensitive, provided they do not take enough to produce severe symptoms. This is what the layman calls "out-growing" the condition. Desensitization to a food can be carried out through starting the patient on infinitesimally small amounts of the food by mouth and by gradually increasing the amount or by the injection of extracts made from the particular food or foods to which

the individual is sensitive. One must go slowly enough to avoid the production of symptoms if possible. This requires a great deal of patience, but we have successfully desensitized a number of infants to eggs in this manner. The subcutaneous injection is more rapid, but one should begin with an amount sufficiently small so as to be sure that no demonstrable reaction occurs. We often begin with as weak a dilution as 1:1,000,000, or even less if the sensitiveness is severe. In this way we have successfully desensitized a number of children to foods to which they are sensitive, or at least have made it possible for them to take these foods without discomfort—foods, the ingestion of which previously produced severe symptoms.

The above methods not infrequently are attended by discouraging results. Failures in many instances may be due to lack of patience, or may be explained by the fact that treatment has not included all the foods which are contributing to the symptoms.

I am well aware of the fact that all of this is quite familiar to those working especially in the field of allergy, but the discussion seemed justified because of the fact that we continue to see large numbers of patients belonging to this group whose symptoms have received abundant unsuccessful treatment without any thought having been given to allergy as the probable etiologic factor.

HEALTHGRAM

The family is engaged in a variety of activities associated with homemaking, housekeeping, and child care with which we are so familiar that we often fail to realize their significance. If there is to be any effective health care and preventive medicine, as distinguished from treatment of the sick, it cannot be provided by doctors, nurses, or other professionals—however much their knowledge and skills may be needed by the family. Health care and preventive medicine are carried out in the daily activities of housekeeping and homemaking. Through marketing, cooking and the serving of meals, basic nutritional needs must be met, and through housecleaning, laundering, dishwashing, and similar sanitation, the necessary defense against infections and contamination must be maintained. Through provision of rest, care of minor ills, and all the cherishing functions within the home, individual members are protected and restored, so that they can live in health and carry on their daily activities. Lawrence K. Frank, *The Survey*, Dec., 1949.

NEWCASTLE VIRUS DISEASE

Report of Four Probable Cases

EDWIN R. WATSON, M.D.,

and

MARVIN M. HARRIS, PH.D.

Macon

Great interest in Newcastle virus disease of chickens was stimulated by the report of Howitt, Bishop, and Kissling¹ in 1948, showing neutralizing antibodies against Newcastle disease virus in high titer in the sera of 14 children in Tennessee. Neutralizing antibodies were also found in high titer in the sera of 8 adults who had a mild central nervous system disturbance. Antibodies in high titer were also found in 6 laboratory workers who experienced an acute influenza-like infection. To quote Howitt¹ et al: "Although no virus has been isolated, it seems probable from the evidence presented that the Newcastle disease virus of fowls is the agent responsible for many of the atypical central nervous system infections that have been reported in man during the past few years, and that, as in the fowl, the manifestations are neurological in young individuals and influenza-like in the adult".

REPORT OF CASES

Case 1. E. G., colored male 7 years of age, was admitted to the Macon Hospital 11-6-48 in a comatose condition. For two weeks prior to admission, patient had a cold and slight cough, with non-tender swelling of the head in the parotid area on the right side. Patient experienced a severe convulsion just prior to admission to hospital. Three other convulsions occurred the afternoon of admission. There was no fever. There was no past history of convulsions. Family history was negative. Physical examination showed a normally developed 7 year old male. Skin normal. Temperature 98.6°F. Blood pressure 140/100 (after convulsions). No stiffness of neck, and pupils reacted normally. Ears normal. Tonsils hypertrophied. There were a few scattered rales throughout both lung fields. Heart, abdomen, and extremities normal. Chest x-ray showed accentuated bronchovascular markings bilaterally. Patient was very irritable and appeared irrational. Urine was normal. Kahn and tuberculin tests were negative. Five days later white blood cell count was 8,800 with 58 per cent lymphocytes. Spinal fluid had a cell count of one lymphocyte. Smear and culture of spinal fluid were negative. Blood collected 11-9-48, (approximately 3 weeks after onset of illness) showed no neutralizing antibodies against the viruses of eastern and western equine encephalomyelitis. Neutralization index of 2190 was obtained against Newcastle

¹Read before the Medical Association of Georgia in annual session, Savannah, May 13, 1949.

disease virus. Two months later the neutralization index against Newcastle disease virus was 1520.

Patient became rational 2 days after admission and was discharged as well 7 days following admission. Repeated spinal taps during this period yielded negative spinal fluid findings. Impression at time of admission: mumps, encephalitis and possible early pneumonia. Final diagnosis: Newcastle virus disease. Patient had no contact with chickens as far as could be determined.

Case 2. F. A. M., white male, aged 6, was admitted to the Macon Hospital 12-31-48 with fever 103°F. and moderate stiffness of neck. Patient was apparently well until the day before when he developed a severe headache and vomited several times during the day with development of fever (103°F.). Physical examination revealed a well developed child who was febrile but did not appear critically ill. Only positive finding was moderate stiffness of neck. White blood cell count was 9,400 with 83 per cent neutrophiles. Urine was normal. Spinal fluid had a cell count of 70 with 86 per cent neutrophiles. Total protein was 40 mg. Smear and culture of spinal fluid were negative. Day after admission patient's temperature reached 104°F. X-ray of chest showed moderate accentuation of the bronchovascular markings in the roots of both lungs. Blood collected 1-3-49 (5 days after onset) gave a neutralization index of 317 for Newcastle disease virus. Eight days after onset index was 1430 for Newcastle disease virus. This specimen of blood gave a negative complement fixation test for mumps, and negative neutralization tests for eastern equine encephalitis and lymphocytic choriomeningitis. Clinical impression on admission was "virus meningitis". Final diagnosis: Newcastle virus disease. Patient was discharged as improved 5 days after admission. This patient had possible contact with chickens prior to becoming ill.

Case 3. T. J., colored male, aged 16 years, was admitted to the Macon Hospital 1-28-49, in a semicomatose condition. The day before while playing basketball he became faint, and was "light-headed" with "foaming at the mouth". He remained semicomatose for 48 hours after admission. Physical examination showed a well-developed 16 year old colored male, semicomatose with weakness in the right arm. Blood pressure was 150/90. Temperature 101°F. There were no other physical abnormalities except for poor to absent reflexes. White blood cell count was 11,400 with 80 per cent neutrophiles. Urine negative. Blood Kahn negative. Spinal fluid 1-28-49 (on admission) showed 109 cells with 62 per cent lymphocytes, total protein and sugar were normal. Smear of spinal fluid was negative. On 1-29-49 spinal fluid had 97 cells with 83 per cent lymphocytes. Colloidal gold test negative. On 2-2-49, spinal fluid had 56 cells with 94 per cent lymphocytes. Smear and culture of spinal fluid were negative. On 2-7-49 (10 days after admission) spinal fluid showed 36 cells, all lymphocytes. Spinal fluid Kahn was negative, with total protein and sugar normal. Patient's temperature reached 103.6°F. the night of admission and gradually came down to normal on the fifth day. Blood collected 1-31-49 (7 days after onset) gave a negative neutralization index for eastern equine encephalitis and a positive neutralization index of 21,900 for Newcastle disease virus. Three weeks after onset, neutralization index for Newcastle disease virus was 10,000. Six weeks after onset, the index for Newcastle's was 213. Working diagnosis on admission was cerebrovascular accident which was later changed to lymphocytic choriomeningitis. Final diagnosis: Newcastle virus disease. Subsequent history elicited after discharge showed patient had been in contact with chickens.

Case 4. T. M., white male, 7 years of age, was admitted to the Macon Hospital 3-6-49 with chief complaint of headache the day before, followed by vomiting and fever 102°F. Reflexes were hyperactive and initial impression was meningitis. Physical examination revealed a well developed child who was febrile but did not appear acutely ill. On admission white blood cell count was 16,750 with 84 per cent neutrophiles. Urine was

negative except for 1+ acetone. On 3-8-49, the white blood cell count had dropped to 8,250 with 44 per cent neutrophiles and 56 per cent lymphocytes. On admission, spinal fluid showed 822 cells with 75 per cent lymphocytes, 60 mg. of protein, normal sugar. Smear and culture of spinal fluid were negative. Tentative diagnosis at this time was lymphocytic choriomeningitis. Blood collected 3-9-49 (4th day of illness) gave a neutralization index of 132 for Newcastle disease virus and a 4+ complement fixation test for mumps—titer 1-4. Blood collected 3-14-49 (9 days after onset) gave a neutralization index of 1480 for Newcastle disease virus, and a 4+ complement fixation test for mumps—titer 1-32. Patient's temperature on admission was 102°F. and reached 103°F. two days later and gradually came down to normal after 8 days' hospitalization. Patient was discharged improved.

This child had possibly been in contact with neighbor's chickens. The child had no history or signs of mumps. Since a low titer (4+ 1-4) complement fixation test for mumps was obtained on the fourth day of illness and this titer rose on the 9th day (4+ 1-32) it is possible that we are dealing here with a case of mumps encephalitis which gave cross-neutralization tests for Newcastle disease virus. On the other hand, since the neutralization index rose from 132 on the fourth day to 1480 on the 9th day, a marked rise in titer in 5 days, we feel that this is a case of Newcastle virus disease in which complement-fixing antibodies for mumps from a previous unrecognized mild mumps infection were restimulated by the Newcastle disease virus—an anamnestic reaction. Final diagnosis was therefore made as Newcastle virus disease.

Summary

Four cases are presented in which antibodies were present in the blood in high titer for Newcastle disease virus. Two cases could be classed as severe since they were admitted to the hospital in a semicomatose condition. The other two cases were mild in nature with chief complaint of headache, vomiting, and fever, with some stiffness of the neck in one case. All four cases showed some meningeal irritation or meningitic-like symptoms and all cases recovered rapidly without sequelae. Three of the four cases had contact with chickens. Although the virus of Newcastle's disease was not isolated from any of the cases, the high blood titer of antibodies for Newcastle disease virus would seem to point to the fact that these cases had been in contact with the virus. Newcastle virus disease should be included as one of the possible diagnoses in all cases in which neurotropic virus infection is suspected.

Acknowledgment: It is a pleasure to acknowledge our indebtedness to Miss Beatrice Howitt, bacteriologist in charge of the U.S.P.H.S. Virus Laboratory, Montgomery, Alabama, who performed the virus tests.

Note: For virus studies of the blood, 20 cc. or more of

sterile clotted blood should be submitted for examination.

Addendum: After this paper was prepared and just prior to this presentation, we received a communication from Miss Howitt to the effect that there is a heat-labile factor that may be responsible for the positive neutralization tests against Newcastle disease virus which probably has no real connection with this virus. Research, which is still in progress, seems to indicate that there is another virus, as yet unidentified and unrelated to Newcastle's, which may be the real etiologic agent in such cases as presented. These results bring out some of the difficulties and problems in virus research today. Steady progress, however, is being made and the virus or viruses responsible for such cases as here presented will undoubtedly be identified in the near future.

REFERENCE

Howitt, Beatrice F., Bishop, Lindsay K., M.D., and Kissling, Robert E., D.V.M., "Presence of Neutralizing Antibodies of Newcastle disease virus in Human Sera", *Amer. Jour. Pub. Health*, Sept. 1948, Vol. 38, No. 9, Pp. 1263-1272.

MASKED HYPOTHYROIDISM AS A BASIS FOR SYMPTOMS

W. EDWARD STOREY, M.D.

Columbus

It is obvious that the readiness with which one recognizes any diseased state depends upon the constancy with which he bears it in mind. Every physician has experienced delay in arriving at a correct diagnosis because he failed to remember it while weighing the several possibilities in a given situation. When the features of the case under consideration are largely subjective and common to various ill-defined disorders, the lesson is difficult and the error likely to recur. Nowhere is this better illustrated than in thyroid dysfunction, especially under-function in the milder grades.

It is doubtful whether any interested physician would fail to recognize a well developed case of myxedema or Gull's disease. The history of progressively reduced physical, mental and emotional vitality culminating in constant lethargy, the increasing body weight, obstinate constipation, and marked preference for warmth all point to the correct diagnosis. These and the puffed facies, the thickened tongue and speech, the pallor, the dry, brittle hair and one hardly needs a

test of metabolism except for confirmation. Unfortunately, however, for the sharpening of one's diagnostic acumen, this patient is uncommon to say the least. It is the individual whose complaints and findings are less well manifested or who may even make an entirely different impression who is likely to escape recognition and to come eventually to be regarded as an inadequate personality. Indeed, many patients exhibit a degree of physical and emotional agitation which suggest at once thyroid overactivity. In such cases the report of lowered basal metabolic rate may be received with suspicion or accepted with reluctance because it is so contrary to that which had been anticipated.

For present purposes, the effect of the thyroid gland upon the body may be compared to the effect of the damper upon a stove. Efficient utilization of fuel for production of heat depends upon proper adjustment. Over or under adjustment results in excessive or deficient consumption of fuel with corresponding change in output of heat. It is the latter state with which one may compare the several degrees of hypothyroidism. The reduced supply of thyroid catalysts reduces the rate of cellular chemical reactions, and is reflected in a lowered rate of oxygen consumption as determined by basal metabolic test. Such a reduced rate of cellular oxidation is evident, sooner or later, in reduced functional efficiency of the tissues of the several organs and thus is the basic cause of the multiple and scattered clinical symptoms and signs. Tissues whose optimal function is more delicately balanced with oxidation will be affected first and most. Others, not so dependent, will be deranged later and less. Here the patient's individual physiologic variations and requirements must play a very large part in the initial or predominating organ manifestation and account for the diversity of chief complaints. Therefore, for present clarity,

From the Medical Service, Columbus City Hospital, Columbus.

Read before the Centennial Session of the Medical Association of Georgia, Savannah, May 13, 1949.

hypothyroidism may be regarded as a quantitatively variable state ranging from clinically imperceptible changes through obvious illness, to disability and, if unrecognized and untreated, to death. The clinical features of the more advanced degrees of this state are sufficiently uniform as to deserve a name, myxedema. It is these features of myxedema, sketched above, which the average physician usually has in mind when he thinks of hypothyroidism. Therefore, when his patient lacks them, he is likely to be misled into ruling out this diagnosis. Yet, from the present analysis, it would appear that hypothyroidism may frequently be the basis for a wide variety of symptoms, even certain ones which suggest the opposite state, namely hyperthyroidism. Moreover, underfunction it seems must reach the myxedematous level before the usually expected features of that state become apparent. Prior to attainment of that low level, the diversity of symptoms is considerable and only a small portion of cases present features which arouse suspicion toward hypothyroidism.

In 1000 patients, painstakingly studied, various degrees of hypothyroidism occurred 89 times and this is 8.9 per cent of the total, a substantial figure. It is entirely probable that even more patients, among this total, had thyroid underfunction but at least this many were discovered. From this group, 50 cases were selected for the present analysis. Only cases were chosen who had two comparable basal metabolic tests done on separate days. In each case, total serum cholesterol was determined.

The only medication given during the period covered in this study was desiccated whole thyroid substance orally (Armour's). Following establishment of diagnosis, the usual plan was to prescribe 4 grains of thyroid daily, taken as one dose before breakfast. At 10 to 14 days later basal rate was

redetermined and, if satisfactory, thyroid dosage was reduced to a daily maintenance level of 2 grains. In a few instances, a dose of 6 grains was found necessary to achieve satisfactory symptomatic and metabolic improvement and several patients required 3 or 4 grains daily for maintenance. As further evidence that diagnosis and therapy were correct, a few patients, who improved satisfactorily, became careless in regard to the daily maintenance dose. After a few weeks most of the former symptoms began to recur. Redetermination of basal rate showed recession and resumption of a proper dose again effected a good result.

So, if these patients may be accepted as true examples of hypothyroidism, it is profitable to analyze the symptoms which brought them to the physician. Complaints were always multiple, sometimes remarkably so, and occasionally it was difficult to decide which predominated. Notwithstanding this, they could be divided into 3 general groups which are convenient for present purposes:

1. The first group included 13 patients, or about a fourth of the total, whose complaints suggested, in some degree, myxedema. The common denominator among these complaints might be stated as an unaccounted-for reduction in physical, mental, and emotional vitality. The particular variant of this might vary from patient to patient as, for example: loss of strength, easy fatigue, difficulty concentrating, loss of interest in work or home, episodes of acute exhaustion, failing memory or indifference to husband or wife. There were other voluntary complaints such as flatulence, constipation, increased nervous irritability or ill-defined pains, but these were usually subsidiary in the patients' own appraisal and, where these were consistent with myxedema, they were hardly ever of such severe degree as found in that condition. Sometimes direct interrogation elicited an acknowledgment of dry skin or hair, preference for warmth, or a clumsiness of gait, but the answers were uncertain and therefore of doubtful significance.

Among this group the physical findings, except for body weight, were seldom striking. Infrequently a mild simple hypochromia or a lowered blood pressure or, perhaps, a less moist skin was found, but these features are so common to other ailments that interpretation was inconclusive.

The impressive mongoloid facies of myxedema, the brawny, non-pitting tissues, sparse hair and eyebrows, cool, dry, branny, reptilian skin, thickened tongue and blubbery speech, the complacent attitudes and slow movements, the enlarged, globular heart with a distant, one-tone tick and the electrocardiographic features were all entirely lacking in these cases. Therefore, if one approached these patients mindful of Gull's description, he must surely pass them up as too dissimilar. Yet they all were proven to be cases of hypothyroidism.

2. The second group included 18 patients, or just over a third of the total. Almost invariably these patients were given a metabolic test because the examiner thought he was being smart enough to sense an overactive thyroid gland. Here the symptomatic common denominator might be expressed as increased nervous tension. Again there were multiple features which overlapped, to some extent, with the other groups, but basically the general impression was just opposite to that of the first group. There were speed, agitation, overperformance, as contrasted to sloth, depression and underperformance. Individual variants included excessive drive manifested as a compulsion to constant activity, general restlessness, an unwarranted anxiety and concern over trivial or improbable matters, insomnia and physical tiredness yet inability to relax and rest, emotionalism and emotional storms, paroxysmal tachycardia, excessive appetite, and menstrual dysfunction. In regard to menstrual disorders, some of these patients, who were women in their middle years with recent variations in menstrual pattern, presented an impression which differed in no important way from usual menopausal syndrome. Indeed, that diagnosis might justifiably have been made from a symptomatic viewpoint and estrogenic therapy used. Had they not responded well they would have remained, to some degree, puzzles. Actually their response to thyroid was excellent, including regulation of menstruation which thus far, over some months, has remained so. Undoubtedly they will eventually experience a cessation of menstruation, but as yet it is too early.

Subsidiary complaints included occasionally a sense of fullness in the region of the thyroid gland and sometimes so-called choking spells. In a few, the thyroid isthmus and/or lobes were palpably or visibly enlarged to a slight degree. In others a complaint of dryness or ill-defined impediment to swallowing accompanied such fullness of the gland. No bruit was heard in any case. Most patients were of normal weight and some were below the standard for age and height, though none admitted progressive loss. Tachycardia as a persistent feature was lacking and none acknowledged inappropriate sweating. Frequently the undue drive alternated with periods of simple physical exhaustion. Here again, flatu-

lence and constipation were about as common as in the first group; there was no episodic diarrhea. Notwithstanding the absence of flush and sweat, a bounding heart, stare, tremor, thinness, or a full gland and bruit, the possibility of masked hyperthyroidism made one keen to see the report of basal metabolic test. It was these cases in which the report, when rendered, was accepted with some misgiving until sufficient experience was accumulated to make it clear that they were indeed instances of true hypothyroidism.

3. This group was composed of the remaining 19 patients. Their chief complaints were not readily suggestive of any kind of thyroid dysfunction. Most of them came as diagnostic problems and, in several instances, they had first consulted one or more specialists who they had believed were indicated for their particular complaints. After varying periods, they were either referred by such specialists for general physical survey or, of their own accord, they sought it.

Examples illustrating this circuitous approach were 9 cases of headache. As may be imagined, nearly all of them had been seen by one or more specialists and usually they had purchased glasses, sometimes several pairs. They had been suspected of nasal, aural or dental disease, and had been x-rayed and treated locally and systemically for various suspected disorders of these parts. Some of these headaches were regarded as migrainous in nature, others as allergic or psychogenic. Sometimes other features of a case, such as flatulence or constipation, were blamed and treatment directed to the stomach or bowel. In one case, serious disease of the central nervous system was suspected and lumbar puncture done. The dynamics, chemistry and cytology of this fluid were all normal.

These headaches were as likely to be in one area as another, though most were diffuse and all were bilateral. They had recurred with increasing frequency and duration over a period of several years. Notwithstanding attention by competent physicians they seemed to conform to no recognized clinical pattern and thus no clear idea had been developed regarding their nature. No papilledema or objective neurologic signs were found in any case. If one interrogated these patients with hypothyroidism in mind, some one or more corroborative features could be elicited, but of course that is now hindsight which is always easier than foresight. In retrospect, it is now obvious that, after careful history and physical examination were completed, the earlier basal metabolic rate and serum cholesterol were determined, the more delay, suffering and expense were spared.

The next most frequent complaint was scattered muscular aches and soreness. These patients had suspected themselves of being rheumatic and sometimes it had seemed so to their

physicians because the matter is indeed often one of opinion and not always subject to proof. Moreover, their ages made it seem reasonable. Sometimes they thought the discomfort was worse during weather change or with the advent of fresh infection such as a cold. Most often such aches involved the neck, shoulders, back, hips and thighs, and occasionally the calf. Interestingly, it was symmetric in distribution and degree and there was a striking lack of articular or periarticular involvement. No rubor, calor or tumor was acknowledged. Again, if sought for, corroborative signs warranting a suspicion of hypothyroidism were sometimes to be found in the forms of rounded bodily contours, sallow complexion or a history of constipation or reduced perspiration. Otherwise, they were easy to overlook or to attribute to other causes. Where x-rays had been made they were either free of defects or showed nothing conclusive. Proof that these pains were not rheumatic but, instead, due to hypothyroidism was evident in their complete abolition after a suitable period of thyroid therapy. A further substantiating fact in this connection was the tendency to accentuation of such pains shortly after commencing thyroid and then rapid clearance, a common experience when such pains are a part of the better known syndrome of myxedema.

The remaining patients among this group, a residual of some 7 cases, had chief complaints suggesting a variety of non-thyroid disorders. Among them were recurrent skin eruption, flatulent dyspepsia, vertigo, and paroxysmal auricular tachycardia with ventricular premature beats, and a very severe emotional disorder. Had examinations been less painstaking and less complete there might be large room for doubt concerning the relation of these complaints to hypothyroidism. As they were, however, it is stated with confidence that the evidence for thyroid underfunction was adequate and the evidence for other causes lacking. Perhaps the relation was not always a direct one in that some of the above-mentioned states, whatever their basic etiology, are known frequently to be provoked and aggravated by increased nervous tension. Therefore, since in group 2 such tension is seen to be a frequent accompaniment of hypothyroidism, it is believed to have served as the more immediate basis which itself was present because of the underfunctioning thyroid. Evidence supporting this view is seen in the satisfactory symptomatic result only after thyroid. When sedatives and other measures directed to the tension alone had been used, symptoms persisted.

While each of these cases presents its own intriguing details, time will not permit their full analysis. Instead, one case involving serious emotional disorder will be sketched because it illustrates so well the practical importance of this subject. A 24-year-old white female had been gradually adding a few pounds each year for

several years. Six months earlier she had become unduly concerned over the welfare of her husband and only child. She began to fancy all manner of tragic situations involving them and often she couldn't sleep at night for contemplating these. This led to periods of physical depletion during which she was depressed, less communicative and apathetic. She became increasingly incapacitated for her ordinary duties and actually neglected her family in her anxiety or depression over them. She felt unsure if not suspicious of other relatives and, in general, alarmed everybody by her unwarranted behavior. For several years her husband had noted enlargement of the thyroid gland. The preoccupation led to anorexia and she began to lose a few pounds. He took her to a surgeon who declared she had hyperthyroidism and did a subtotal thyroidectomy. In retrospect, both she and her husband emphatically deny that she was given a test of metabolism at any time before or after operation. They were told that the operation was necessary to reduce the effects of a "toxic condition of the thyroid gland". Operation did nothing to benefit her; instead all features became increased. After several weeks the surgeon advised psychiatric consultation which had to be sought in another city. Admittedly, the psychiatrist was at a disadvantage with but a single interview upon which to base his impressions, but he suspected a manic-depressive psychosis. The prognosis was guarded and therefore assumed by the husband to be discouraging. He brought her home in an attitude of resignation and soon began to suffer himself with insomnia, flatulence, fatigue and emotionalism. It was during an interview referable to his own symptoms that discussion of his wife came up. Since she was not currently under the care of anyone he expressed the desire to have some local physician familiar with her history in case of need.

When first seen, some 2 months following operation, she was preoccupied with the thoughts described and emotional over her own reduced health, but she was entirely oriented and had satisfactory insight. Physically, she was still overweight, allowing for some recent loss, and there was rather dry hair and skin, a pulse of 66 and embryocardial heart tones. Menstruation had been excessive in amount and duration for a year. There was nothing else to suggest hypothyroidism. All else was essentially normal. Basal rate was minus 34 and minus 31 per cent and total serum cholesterol was 390 mg. per cent. A month after starting thyroid she was less obsessed but not enthusiastic over her progress. She had lost about 6 pounds, most of it soon after starting thyroid and notwithstanding improved appetite and unrestricted diet. After two months of therapy she could laugh at the absurdity of her former fears and since then has continued well except when smaller daily main-

tenance doses were tried. When basal rate was found to be drifting below minus 15 per cent, mild depression and reminiscences of the bad days then menaced her. Surely there must be other similar cases about and a most satisfying reward awaits the physician who is mindful of hypothyroidism.

The three general groups outlined above take account only of the chief or predominating complaints of these 50 patients and, as stated, complaints were always multiple. A tabulation of the frequency with which all complaints occurred, in some degree or other, shows that, among this total group, increased nervous irritability was named 33 times, reduced physical drive 25 times, overweight or weight-gain 24 times, headaches 21 times, constipation 19 times, scattered muscular pains 15 times and easy fatigability 10 times. In addition to those named in the three groups there were, with varying frequency, undue sensitivity to cold, dry throat, thyroid fullness, complaints referable to the hair, unwarranted anxiety, insomnia, reduced sexual libido, failing memory, difficulty concentrating, and flatulent dyspepsia.

In summary, then, it is justified to make the following general observations.

1. Whereas myxedema is characterized by a fairly consistent group of complaints and physical findings, the lesser degrees of hypothyroidism are not. On the contrary, complaints are widely varied, inconsistent from case to case, and, in many instances, least suggestive of thyroid dysfunction if myxedema is to be followed as the general pattern.

2. Many cases of mild to moderate hypothyroidism present complaints, but seldom, if ever, physical features, which are definitely suggestive of thyroid over-function. The common denominator among these cases is increased nervous tension which may be manifested in a variety of ways. If the metabolic test has been reliably performed, it should decide the question. An elevated

serum cholesterol further assures the matter. In nearly every such instance the doctor will be justified in letting the laboratory reports overrule his clinical impression.

3. There are no important or consistent physical findings in mild to moderate hypothyroidism except insofar as the physical features of myxedema may be incompletely developed. Taken by themselves, such features are often in contradiction to the patient's complaints or are easily overlooked.

4. Almost any patient who presents multiple somatic complaints which are unsupported by comparable physical or laboratory findings may have mild to moderate hypothyroidism and deserves a metabolic test. The latter, however, should be done with care and interpreted with judgment.

5. Masked or inapparent hypothyroidism of mild to moderate degree is demonstrated, by the present 50 cases, to occur with greater frequency than may be generally recognized and to serve as a basis for multiple symptoms, some of which can be disabling. This basis is easily correctible by simple oral medication.

1308 Third Avenue
Columbus, Georgia

DISCUSSION

DR. HAL M. DAVISON (Atlanta): Dr. Muecke has presented clearly and convincingly a subject which, while already important, will assume more importance in medicine of the future. Allergic reactions as a whole are increasing in frequency, and we pay far too little attention to food allergy. As Dr. Muecke stated, we often overlook allergic reactions in our patients because we do not even consider the possibility of their being present.

Infants may become sensitized to foods in utero because of the passage of unchanged food protein through the placenta from the mother's blood, and also may become sensitized to unchanged food protein present in breast milk, and therefore may show an allergic reaction following the first ingestion of a food.

Other children inherit the ability to become sensitive to foods, and develop sensitivity to certain foods after eating them for a time. Apparently, an infant is more apt to become sensitive to foods while suffering from enterocolitis. It is believed that the altered state of the intestinal mucosa facilitates the passage of unchanged foods into the blood.

Bronfenbrenner, of St. Louis, has shown that guinea pigs in a state of scurvy are readily sensitized to egg white by ingestion. Pottenger, of Monrovia, California, has produced allergic manifestations in cats by feeding them cooked foods only. Proper feeding of all foods for four generations was necessary to eradicate the allergy

in the offspring of these cats.

There seems to be no doubt that the allergic state affects the nutrition of our patients, and that various states of malnutrition facilitate the production of sensitivity in experimental animals, and probably in our patients. It is more than likely that the production of the allergic state in an infant depends more on the state of nutrition of the pregnant mother than upon any other one thing.

Skin testing for food sensitivity may be done at any age, and direct testing of the patient is more accurate than that done by passive transfer. Tests should be made not only with extracts of the foods that are being eaten by the infant, but also by extracts of other foods that may be used to supplement the diet.

As Dr. Muecke stated, however, the best proof of food sensitivity is the fact that symptoms are relieved by removing a food from the diet, and reproduced at will by reintroducing the food into the diet. Some of our patients may be mildly sensitive to some foods and may be able to eat them every second, third or fourth day without manifesting symptoms. Some allergic patients become sensitized easily to foods they eat every day. For both of these reasons it may be advisable to feed our patients in a cyclic manner, using three to four separate diets.

It is appropriate to conclude this discussion with a quotation of part of the last sentence of Dr. Muecke's paper: "We continue to see large numbers of patients belonging to this group whose symptoms have received abundant unsuccessful treatment without any thought having been given to allergy as the probable etiologic factor."

DR. WILLIAM R. DANCY (Savannah): From time to time we have heard that many people are sensitive to fish foods, and that certain conditions promote this urticarial reaction.

Having had a lot of experience along this line, because I have lived on the coast, I would like to say that there are many people who are sensitive to crabs, to fish, to shrimp and to oysters. It does not mean that if they are sensitive to one of these they are sensitive to all. The fact is that they may be sensitive to one and not to the others.

Dr. Davison has brought out the secret of treating these cases (which in our hands has been very successful); namely, that of changing the diet and eliminating the sensitive food from time to time and giving the sensitive food in small quantities, gradually increasing the amount of this food up to the stage of reaction. We have cured many cases that are sensitive particularly to shrimp and crabs.

Another feature that I want to bring out (and we hear it particularly inland) is never to eat fish food along with milk. If the fish food is fresh you can take milk—sour, sterilized, fresh, raw, or any way you wish—clabber, buttermilk, or anything else—and you will not have any trouble with the fish food. However, if the fish food is at all decomposed you will have trouble.

I am not sensitive to fish foods, but last year in Atlanta we went to an Emory dinner and the piece de resistance was a cocktail of shrimp. It didn't state the age of the shrimp, but I had to eat one of the shrimp because I had it in my mouth. It was definitely spoiled, and that night I had an urticarial rash. That was not due to the fact that I had had enough ice cream to affect the shrimp, because the small amount which I ate was hardly sufficient to taste.

I want to bring out the point that milk does not have any ill effect, or has no ill effect to my knowledge, when drunk at the time fresh fish foods are eaten.

DR. CHARLES RICHARDSON, SR. (Macon): In regard to emphasizing the point that Dr. Hatcher brought out in his paper, this is a very important thing; namely, that practically all lateral aberrant tumors of the thyroid are papillary carcinoma. For many years we did not know that, and now, when we find them, we not only

remove the tumors but we remove the same side of the thyroid gland. Practically always you find a primary tumor in the tip of the upper pole. If you don't find it, it should be removed anyway. If you care to you can follow this procedure with irradiation, but it isn't entirely necessary because these tumors are of low malignancy and complete removal usually does away with them.

DR. C. H. RICHARDSON, JR. (Macon): Hypothyroidism is a disease generally seen by the internist and Dr. Storey has brought us a very stimulating presentation from his experience. However, there are two occasions when the surgeon also may be called upon to recognize this condition.

One is the patient with goiter, who is also nervous and fatigued, and is a little overweight and in whom hyperthyroidism is suspected. Only a careful examination and a low basal metabolic rate will show that hypothyroidism is the true cause of symptoms and that subtotal thyroidectomy, while perhaps still indicated for the goiter, will not alone relieve these.

The second instance is hypothyroidism arising after subtotal thyroidectomy for hyperplastic goiter. We have seen this in perhaps 10 to 15 per cent of cases and peculiarly it has occurred only in the diffuse toxic goiter, not the nodular or nontoxic, regardless of the operative technic. After a period of 8 to 12 weeks the symptoms become pronounced and generalized swelling may occur as well as the other symptoms described by Dr. Storey. Two cases developed bilateral effusion of the knee joint which disappeared only on thyroid medication.

Headache has been seen as well as insomnia and increased irritability and as the appetite is reduced gain in weight is not always noted. Fortunately, in the post-operative cases the patient seems to adjust in a few months and rarely needs to continue thyroid therapy.

Dr. Storey has outlined the need for adequate thyroid medication. I would like to ask if hypothyroidism, like hyperthyroidism, is a cyclic disorder with changing need for therapy dosage or is it a permanent progressive disease?

This is an excellent paper and Dr. Storey is to be highly commended.

DR. A. H. LETTON (Atlanta): I want to say just a word or two about Dr. Storey's very interesting paper on hypothyroidism, and to second what Dr. Richardson has just said, and to thank him for pointing out the difference between myxedema and hypothyroidism.

As we tried to point out yesterday, certainly everyone who has hypothyroidism does not have myxedema. If you will look back into the Greek meaning of the word "myxa", it means "mucus", and "aidema" means "swelling". Thus, by definition, it is a mucus type of swelling of the tissues and does occasionally appear in some instances of hypothyroidism, but not in all.

We have noted some three instances in which we have had people who have had hyperthyroidism with high basal metabolic rates and yet had myxedema. In each instance removing the goiter has cured their myxedema. The moral of this is that you can't depend on myxedema as an indication of the action of the thyroid gland with any degree of accuracy.

I believe it is most important for us to realize that there are many instances of masked hypothyroidism which can easily go undiagnosed and we should all be alert for such. We should thank Dr. Storey for bringing this excellent message to us.

DR. A. M. PHILLIPS (Macon): First of all, I want to congratulate the essayists of the last series of papers on the presentations we have just heard. They were kind enough to send me copies of their presentations. I read them over very carefully and enjoyed them. However, since my work is limited to rectal conditions, I feel that I can discuss only the paper presented by Dr. Bateman, of Atlanta, "Surgical Treatment of Pilonidal Cyst—A Simple Ambulatory Method."

As we all know, pilonidal cysts have come more to

the front in the past ten years. A pilonidal cyst is sometimes referred to as "jeep disease", due to the fact that so many of these pilonidal cysts have been found in the past few years in service men and the pre-existing cyst, which is congenital, had in some way or other been bruised and later become infected.

As far as the treatment of pilonidal cyst is concerned, there are two methods. Each of these has its own advocates; namely, the open method and the closed method. The success of either method depends upon complete eradication of the cyst and all of its ramifications.

As far as the preliminary treatment mentioned by Dr. Bateman is concerned, we all realize that whether it is a pilonidal cyst or any other surgical condition we may consider elective, the general welfare of the patient certainly should be considered, and all means at our disposal should be used in getting the patient in the best physical condition before operation.

Probably I have not gone as far in this direction as has Dr. Bateman. Be that as it may, it does behoove us all to have the general welfare of our patient in mind.

As to the two types of treatment; namely, the closed and the open methods, to a great extent I have used the open method. My results have been made much more satisfactory, and the hospital time is certainly no longer than with the closed method. The loss of time from work is no greater than with the closed method, and as a rule the patient is back on the job in eight or ten days. I do not mean that recovery has been complete, but he has recovered sufficiently to resume his usual occupation.

When I say "his" occupation you might think I am intimating that all of these cysts are found in male individuals. Twenty years ago I read an article in which that statement was made that it was a disease of males. I have since found a considerable number of women and girls with pilonidal cysts. However, I would say the percentage is certainly less than 5 per cent.

There is one thing I would like to bring to your attention. It is purely and simply a personal observation, and I would like anyone in the audience who has found a true pilonidal cyst in a colored individual to tell me about it. I have seen a good many colored patients with rectal complaints (we usually class this as a rectal condition), but there is usually no connection between the cyst and the rectum unless there is a fistulous tract which is abscessed and has broken through into the rectum. It has been my personal observation that pilonidal cyst does not occur in colored individuals, and I would like to know if anyone has seen it in a colored individual.

The operative technic which Dr. Bateman has used, as illustrated here, is very nice. You find very few cases where you can use this modification of the marsupialization. It is fine when you have a firm base and can suture the edges of the skin to the bed. That is probably done more in operations for fistula than in a pilonidal cyst operation.

His idea of bringing the edge of the skin down and suturing it around does do away with a lot of the cauliflower-like appearance of the open wound, which comes about after a few days' time, and the healing time is shortened thereby.

DR. MARION C. PRUITT (Atlanta): I would like to answer the question that Dr. Phillips asked about the occurrence of pilonidal cyst in the colored race. Yes, they do occur in the colored race.

In a series of my own experience of operative cases, between 700 and 800 cases, two were in the colored race. One was in a Negro girl.

The case in the Negro girl you will find reported in my book on "Modern Proctology." This case was seen at Grady Hospital and had been treated for a long period of time with various types of escharotics, and had been followed by a great deal of keloid conditions which made a very extensive and ugly condition to treat by any method at that time.

THE SURGICAL PLAN OF THE MEDICAL ASSOCIATION OF GEORGIA

(A) Objectives and Principles

The Medical Association of Georgia (hereinafter sometimes referred to as the "Association") establishes as its objectives:

(1) To increase the extent to which voluntary insurance against the cost of medical care is made available to the people of the State of Georgia;

(2) To increase the effectiveness of such insurance through the voluntary cooperation of its members;

(3) To make such insurance available at the lowest practicable cost under competitive conditions; and

(4) To safeguard the physician-patient relationship deemed necessary by the Association to maintain and improve the high standards of medical care in the State of Georgia.

In order to attain such objectives the Association hereby sponsors a program of prepaid non-occupational surgical insurance on the following principles:

(1) The attached Master Schedule of Surgical Indemnities shall serve as a standard for use in connection with this plan; such schedule is subject to change by the Association as conditions and experience warrant.

(2) The Association shall make a determined effort to obtain the consent of its members to participate in the plan. Participation shall mean the doctor's agreement with the Association to accept for a minimum of one calendar year the amounts in the Indemnity Schedule as full payment for the procedures listed therein for persons coming within the defined income group and their dependents insured under policies endorsed by the Association, as hereinafter set forth; provided such persons authorize that the benefits be paid by the insurance carrier direct to the physician.

(3) The Association shall make a determined effort to interest all insurance companies and insuring agencies licensed to do business in the State of Georgia in underwriting this plan.

(4) Persons who shall receive surgical service for the indemnity fee listed in the Master Schedule of Surgical Indemnities include (a) individuals without dependents whose incomes do not exceed \$2,400 per annum, and (b) individuals with dependents whose incomes do not exceed \$3,600 per annum. Persons whose incomes exceed such limits shall have such indemnity fee applied towards the physician's total bill with such persons liable for any additional fee charged by the physician. These income limits are subject to change by the Association from time to time as warranted by conditions and experience.

(5) Each insurance company or insuring agency desiring to have its policies approved under this program shall submit to the Association

tion the policy form or forms it plans to offer with the endorsement of the Association; such policy forms may include coverages in excess of that required by the Association for endorsement.

(6) The Association shall review the policy forms and, if it finds that the Indemnity Schedules and other provisions in such policies, except as hereinafter noted, meet the minimum standards of coverage and believes that the promotion and sale of such policies will contribute toward the attainment of the objectives of its program, the Association shall forthwith grant its consent to the use by the company of the statement "The Benefits in this Policy are Accepted and Approved by the Medical Association of Georgia," or such similar statement as may be approved by the Association, on such policy forms and in its advertising and promotional literature to be used in connection therewith; for the sake of simplicity, some of the less frequent types of procedures may be omitted from the printed fee schedule in such policy forms, with the understanding that the attached Indemnity Schedule shall govern for unprinted procedures.

(7) All advertisements and promotional literature involving the Association's name shall be submitted to the Association before publication.

(8) The Association shall be under no obligation whatsoever to review the premium rate or rates of those policies submitted for its approval under this program, since it is the desire of the Association to permit such rates to seek their natural levels through competition; however, the Association may request any company to furnish it with the rates at which the policies are to be or are being offered to the public and the company shall comply with such request within a reasonable time.

(9) The Association may request experience and enrollment figures from any insurance company and the company shall comply therewith in reasonable time, but such statistics shall not be made public in any manner which will identify any of the statistics with any one insurance company without that company's consent.

(10) An insurance company whose policies are approved under this plan shall not interfere with the insured's free choice of a physician.

(11) The Association shall not interfere with an insurance company's rights and obligations under the terms of the policy form endorsed by the Association provided, however, that payments made by the insurance company under such policy for procedures not listed in the attached Indemnity Schedule shall be subject to review by the Association.

(12) The Association may at any time, upon thirty days' prior written notice to an insurance company, withdraw its consent to the use of its endorsement on any policy form and in advertising and promotional literature in con-

nection therewith. In the event of such withdrawal (a) the company shall cease forthwith to use such endorsement on all new policies on such forms and in advertising and promotional literature in connection therewith; (b) the Association endorsement of all outstanding policies of said company on said form shall nevertheless continue until the next following anniversary date of issue of such policies; and (c) the company shall have no cause of action against the Association except upon proof of malice.

(13) An insurance company whose policies are approved under this plan may at any time, upon thirty days' prior written notice to the Association cease to issue its policies with the Association endorsement. Thereafter, such company shall not use the endorsement of the Association on any new policies issued or in advertising or promotional literature in connection therewith. In such event the Association's endorsement of all outstanding policies of said company shall nevertheless continue until the next following anniversary date of issue of such policies.

(14) An insurance company whose policies are approved under this program shall not be prevented thereby from issuing policies which are not endorsed by the Association so long as such policies and advertising and promotional literature in connection therewith do not use the name of the Association.

(15) A Committee of the Association shall confer with the insurance companies on problems which arise in connection with this program, for the purpose of taking appropriate action upon administrative matters, complaints of persons insured and/or participating doctors, and, if so authorized, to act in the name of the Association to carry out these principles.

(16) An insurance company authorized to sell the Georgia Surgical Plan may, at its discretion, offer additional allied coverages, to wit: (1) hospitalization, (2) accident and health, (3) medical. This provision shall apply to groups averaging 25 persons or less during the previous fiscal employment year. It is further provided that in these instances it shall be made clear in the policy to the insured that the additional plans are *not* a part of the Georgia Surgical Plan sponsored by the Medical Association of Georgia.

(B) *Master Schedule of Surgical Indemnities*
—Including Usual Pre- and Post-
Operative Care

I. Multiple Procedures

When more than one operation is performed at one time, payment will be made for each in accordance with this Schedule, subject to a maximum total of \$175. Furthermore, the maximum total with respect to all operations due to the same or related cause which are performed during a continuous period of disability shall be

\$175. For this purpose all procedures performed through the same incision shall be considered one operation, and operations that are not separated by three months shall be deemed to have been performed during "a continuous period of disability."

II. Unlisted Procedures

In addition to the procedures listed in this Schedule, amounts shall be payable for any other operations. The maximum amounts for such procedures shall be determined in amounts consistent with those listed.

(C) Participating Physician of the Medical Association of Georgia

I hereby subscribe as a participating physician under the program sponsored by the Medical Association of Georgia for surgical insurance as accepted and approved by the Medical Association of Georgia.

In consideration of my being listed as such "Participating Physician," I hereby agree that my charges for the services included in the Master Schedule of Surgical Indemnities and rendered to the insured or his dependents, shall not exceed the amount specified therein, provided the insured is (a) an individual without dependents whose income does not exceed \$2,400 per annum or (b) an individual with dependents whose income does not exceed \$3,600 per annum.

I understand that persons whose incomes exceed such limits shall have such indemnity applied towards my total bill with such persons liable for any additional fee charged by me.

I understand that nothing in this agreement is intended to affect the relationship between the physician and his patient nor to restrict the physician in the exercise of his right to refuse to treat any patient for appropriate professional reasons.

I further agree to abide by the rulings of the Association's Committee which will function under this program for the express purpose of facilitating any administrative problems that may arise.

I agree not to withdraw my consent as a participating physician prior to.....

....., M.D.

Address:.....

Date:.....

PROPOSED SCHEDULE OF SURGICAL BENEFITS GENERAL SURGERY

Operation	Maximum Payment
<i>Infection and Trauma</i>	
Abscess incision and drainage, Furuncles excepted	\$ 5.00
Deep cervical abscess	25.00
Carbuncle	25.00
Ulcer, surface excision	10.00

Tendon, repair, one primary	25.00
each additional	10.00
Maximum	100.00
Septic finger (tendon sheath involvement)	15.00
Septic hand (tendon sheath and compartments)	75.00
Lacerations, extensive, including debridement	25.00
<i>Cysts</i>	
Cyst, sebaceous, removal	10.00
Pilonidal cyst or sinus	50.00
Thyroglossal cyst, removal	100.00
Branchial cyst, removal	100.00
<i>Tumors</i>	
Tumors, benign external, removal	10.00
Tumors, benign, removal deep	25.00
Parotid tumor, removal	75.00
Epithelioma of face, surgical removal	25.00
Cancer of tongue, (resection or removal)	100.00
Same with neck dissection	150.00
Cancer of lip (local operation)	35.00
Same with neck dissection	125.00
<i>Biopsy</i>	
Biopsy, superficial	5.00
Biopsy, bone or bone marrow	15.00
Biopsy, needle aspiration	5.00
<i>Glands</i>	
Glands, superficial, removal	10.00
Dissection glands of neck, deep chain	100.00
Radical Axilla or groin	100.00
<i>Thyroid</i>	
Thyroidectomy, subtotal	125.00
Thyroidectomy, two-stage, subtotal (with or without ligation), complete procedure	150.00
Parathyroidectomy	150.00
<i>Breasts</i>	
Breast abscess, drainage	25.00
Breast cyst or abscess, aspiration	10.00
Breast tumor, benign removal	35.00
Breast, radical removal, including axillary dissection	150.00
Breast, simple removal	75.00
<i>Miscellaneous</i>	
Ligation, saphenous vein low, including retrograde injection, if done	25.00
Bilateral	50.00
Ligation, saphenous vein, high, and combined including retrograde injection	30.00
Bilateral	50.00
Toe nail, ingrown, removal radical	20.00
Stone, submaxillary or parotid duct	25.00
Removal of submaxillary salivary gland	50.00
Injection, varicose veins complete procedure	25.00
Injection without ligation, each	3.00
Maximum	30.00

ENDOSCOPY

(When preliminary and related to surgical service only)	
Bronchoscopy, diagnostic, preceding surgery	25.00

Operative	50.00	Fistulectomy, single, excision of tract	50.00
Cystoscopy		Multiple, excision of tracts	85.00
Observation (preceding surgery)	15.00	Fissurectomy	10.00
Ureteral catheterization	20.00	Polypectomy	25.00
Operative	35.00	Abscess, ischio-rectal or peri-rectal drain-	
Gastroscopy	15.00	age	25.00
Laryngoscopy		Carcinoma of rectum, resection	175.00
Diagnosis (by Laryngoscope)	10.00	Prolapsed rectum, repair	100.00
Operative	25.00		
Sigmoidoscopy and biopsy	10.00	UROLOGY	
Esophagoscopy	25.00	Circumcision, infant not requiring	
		anesthesia	5.00
SPECIAL SURGERY		Circumcision, excepting the above	15.00
<i>Thoracic Surgery</i>		Ureterotomy	50.00
Pneumolysis	75.00	Prostatic abscess	35.00
Pleura, paracentesis	10.00	Prostatectomy, perineal	125.00
Empyema, closed drainage	25.00	Prostatectomy suprapubic—one stage	
Empyema, rib section	75.00	including vasectomy if required	125.00
Phrenic nerve, crushing	25.00	Prostatectomy, suprapubic—two stage	
Thoracoplasty (First stage or partial)	75.00	including vasectomy	150.00
(complete)	150.00	Prostatectomy, transurethral	125.00
Lobectomy	150.00	Punch operation with suprapubic	
Aneurysmorrhaphy	150.00	drainage	120.00
Induction of artificial pneumothorax	25.00	Perineoplasty with urethral repair	75.00
Refills	5.00	Hydrocele, radical operation	50.00
<i>Abdominal Surgery</i>		Litholapaxy	50.00
Abdomen, paracentesis	10.00	Epididymectomy	50.00
Herniotomy, single, inguinal, femoral or		Vasectomy (when not preliminary to	
umbilical	100.00	prostatectomy)	15.00
Herniotomy, bilateral, inguinal or		Vesiculectomy	100.00
femoral	125.00	Varicocelectomy	25.00
Herniotomy, hiatus or diaphragmatic	150.00	Orchidectomy simple	50.00
Herniotomy, ventral or incisional	100.00	With gland dissection	100.00
Esophageal diverticulum	125.00	Cystotomy or Cystostomy	75.00
Gastrotomy or gastrostomy	100.00	Cystostomy with fulguration	100.00
Gastrectomy	175.00	Cystectomy	150.00
Gastro-enterostomy	125.00	Ureter transplantation, single	100.00
Peptic ulcer, perforated, closure	100.00	Bilateral	150.00
Peptic ulcer, subtotal gastrectomy	150.00	Bladder tumor, diverticula, etc (resec-	
Pyloric stenosis (Ramstedt's in infant)	100.00	tion) open operation	125.00
Intestines, anastomosis	125.00	Uretero-lithotomy	100.00
Intestines, (small) resection	125.00	Nephrotomy	125.00
Laparotomy	75.00	Nephrostomy	125.00
Colon, resection	175.00	Nephrectomy	125.00
Colostomy	75.00	Nephropexy	100.00
Appendectomy	100.00	Plastic on pelvis and ureter	125.00
Diverticulum, intestinal (Meckel's)	100.00	Heminephrectomy	125.00
Common Duct with or without cholecys-		Excision and suture of urinary fistula	
tectomy	175.00	(suprapubic)	50.00
Appendiceal, abscess, drainage	100.00	(vaginal)	100.00
Subdiaphragmatic abscess	100.00	Penis amputation	75.00
Cholecystectomy	125.00	Same with groin dissection	150.00
Common duct, resection or reconstruc-		Plastic Hypo and epispadias	125.00
tion	150.00	Meatotomy	5.00
Cholecystotomy	100.00	Caruncle excision	15.00
Cholecystoduodenostomy	125.00	Caruncle fulguration	15.00
Pancreas, drainage	100.00		
Splenectomy	150.00	NEURO-SURGERY	
PROCTOLOGY		<i>Skull</i>	
Hemorrhoids, injection, each \$3.00,		Simple fracture (non-operable) with	
maximum	30.00	brain injury	35.00
Hemorrhoids, external	25.00	Depressed	75.00
Hemorrhoid, thrombosis, incision	5.00	Compound	150.00
Complete hemorrhoidectomy in hospital	85.00	Brain Tumors	175.00
Complete hemorrhoidectomy in office	35.00		

<i>Brain Injuries; operable type</i>			
Extradural hematoma	150.00	cauterization	25.00
Subdural hematoma	150.00	Uterine polyp removal with dilatation and curettage	25.00
Exploratory Trephination, One Side	50.00	Cervical polyp removal	5.00
Two Sides	75.00	Trachelorrhaphy	35.00
Intracortical clot	150.00	Cervix amputation	50.00
Arterio-venous fistula, intracranial	150.00	Oophorectomy or resection of ovaries	100.00
<i>Spinal Cord</i>		Hysterectomy	150.00
Section of anterior or posterior roots	150.00	Myomectomy	100.00
Decompressive laminectomy	150.00	Uterine flexions, etc., correction (plus surgery of tubes and ovaries)	100.00
Removal of or exploration for an extruded nucleus, pulposus or ruptured intervertebral disc	150.00	Same with vaginal plastic work	125.00
<i>Peripheral Nerve</i>		Salpingectomy	100.00
Suture, decompression, or transplantation of single nerve	25.00	Salpingoophorectomy	100.00
Each additional	10.00	Cystocele	50.00
Maximum	100.00	Rectocele	50.00
Pneumoencephalogram	25.00	Combined cystocele and rectocele	75.00
Ventriculogram	40.00	Prolapsed operations (interposition, Manchester)	120.00
Spinal cord tumors	150.00	Vulvectomy	75.00
Operation for pain associated with malignancy or similar untreatable disease requiring intraspinal nerve sections or cordotomy	150.00	With groin dissection	150.00
<i>Miscellaneous</i>		OPHTHALMOLOGY	
Section of sensory root for 5th nerve neuralgia	150.00	Foreign body, removal, within anterior or posterior chamber	90.00
Section of vestibular nerve for Ménière's disease or aural vertigo	150.00	Cornea, paracentesis	20.00
Operation for scalenus anticus syndrome	50.00	Conjunctival suture	15.00
Craniotomy for brain abscess	150.00	Conjunctival flap for corneal ulcer, etc.	25.00
Craniotomy for conditions not listed herewith	150.00	Chalazion (excision) simple	10.00
Bilateral orbital decompression	150.00	Multiple	25.00
Choroidectomy for hydrocephalus	150.00	Lacrimal sac, removal	60.00
Excision of meningocele	75.00	Entropion or ectropion, Ziegler's puncture	30.00
Lumbar puncture (with fracture or operative work only) (diagnostic excluded)	5.00	Entropion or ectropion, plastic operation	50.00
<i>Sympathetic System</i>		Entropion or ectropion, plastic operation grafts or flaps	60.00
Unilateral lumbar sympathectomy	100.00	Synblepharon, release	35.00
Bilateral lumbar sympathectomy	150.00	Pterygium	35.00
Resection of pre-sacral plexus	150.00	Corneal Ulcer cauterization	5.00
Bilateral, thoraco lumbar sympathectomy	150.00	Corneal Ulcer, delimiting keratotomy	30.00
OBSTETRICS		Tarsorrhaphy, orbicularis paralysis	30.00
Pregnancy, delivery (does not cover prenatal and postnatal home and office care)	50.00	Ptosis, (single)	60.00
Miscarriage (curettage)	25.00	Strabismus, one or more muscles	75.00
Caesarean section, vaginal	100.00	Cataract, needling	50.00
Caesarean section, abdominal	100.00	Cataract, removal	120.00
Pregnancy, ectopic	100.00	Iridectomy	75.00
GYNECOLOGY		Removal foreign body of cornea	3.00
Bartholin's gland, incision	5.00	Glaucoma, filtration operation	120.00
Bartholin's gland, excision	25.00	Enucleation or evisceration	90.00
Labial tumors and cysts, removal	20.00	Enucleation with implant	140.00
Atresia of vagina, plastic	50.00	Tumor, exenteration of orbit	120.00
Fistula, recto-vaginal	100.00	Dacryocystorhinostomy	90.00
Fistula, vesico-vaginal	100.00	Detached Retina	150.00
Cul-de-sac, drainage	35.00	OTOLOGY	
Cauterization, each	3.00	Aural Polyp	10.00
Maximum	12.00	Paracentesis tympani	10.00
Dilation and curettage with or without		Mastoidectomy, acute single	120.00
		Mastoidectomy, acute bilateral	125.00
		Mastoidectomy, radical single	175.00
		Fenestration for otosclerosis	175.00
		NOSE AND THROAT	
		Nasal polyps, removal	10.00
		Antrum, Caldwell-Luc	60.00
		Ethmoidectomy	40.00

Frontal sinus, radical	120.00	Each additional	5.00
Turbinectomy	10.00	Hip	40.00
Submucous resection	60.00	Knee	40.00
Palatorrhaphy	100.00	Mandible	10.00
Tonsillectomy and adenoidectomy		Metacarpal bone, one	15.00
Under 15	30.00	Each additional	5.00
Over 15	40.00	Metatarsal bone, one	15.00
Laryngectomy	175.00	Each additional	5.00
Tracheotomy	50.00	Patella	15.00
Malignant disease, accessory sinuses		Rib	10.00
Radical Operation, one sinus	120.00	Shoulder	30.00
Multiple	175.00	Tarsal bone, one	30.00
Malignant disease, tonsil and pharynx		Each additional	10.00
radical operation	120.00	Thumb	10.00
Antrum puncture and irrigation	5.00	Toe, one	5.00
Antrum window	50.00	Each additional	5.00
		Vertebra, one or more	120.00

ORTHOPEDIC

Spinal fusion	175.00
Cartilage of condyle of femur, removal of	90.00
Bone plate, removal of	30.00
Talipes	60.00
Semilunar cartilage, removal from joint	90.00
Tenotomy, simple, open	30.00
Closed	15.00
Claw foot, except bone surgery—see foot stabilization	60.00
Coccyx, excision of	30.00
Arthrotomy, any major joint	90.00
Hallux valgus, single radical operation	60.00
Hallux valgus, bilateral radical operation	90.00
Exostosectomy	30.00
Osteomyelitis, sequestrum removal	30.00
Foot stabilization	175.00
Hammer toe, operation for	40.00
Arthrodesis of knee, hip, shoulder or elbow	175.00
Torticollis, operation for	90.00
Arthroplasty, any major joint	175.00
Hip joint, resection	175.00
Any other major joint, resection	120.00
Any joint, resection of, fingers or toes	30.00

AMPUTATIONS

Shoulder, disarticulation	150.00
Upper arm	60.00
Forearm	60.00
Hand	60.00
Finger, single	15.00
Each additional	10.00
Hip	150.00
Thigh	90.00
Knee	90.00
Leg	90.00
Toe	15.00
Each additional	10.00
Foot	60.00
Elbow	90.00
Scapulo thoracic amputation	175.00

DISLOCATIONS—CLOSED

Carpal bone, one	30.00
Each additional	10.00
Clavicle	30.00
Elbow	30.00
Finger, one	5.00

SIMPLE FRACTURES—CLOSED

Lower jaw	30.00
Carpal bone, one	30.00
Each additional	10.00
Clavicle	30.00
Coccyx	10.00
Femur	90.00
Tibia or fibula or both	60.00
Pott's or Cotton's Fracture	90.00
Finger, one	10.00
Each additional	5.00
Humerus	60.00
Metacarpal bone, one	15.00
Each additional	10.00
Metatarsal bone, one	15.00
Each additional	10.00
Patella, closed	30.00
Nasal bone or bones, reduced	30.00
Pelvis	90.00
Radius or Ulna, or both	30.00
Rib, one or more	10.00
Sacrum	40.00
Scapula	30.00
Skull	40.00
Sternum	30.00
Tarsal bone, one (exclude os calcis and astragalus)	30.00
Each additional	10.00
Toe, one	10.00
Each additional	5.00
Vertebra, one or more	120.00
Os Calcis or Astragalus, or both	60.00

Open Reductions and Compound Fractures—For compound fractures the maximum amount will be one and one-half times, and for fractures or dislocations requiring an open operation will be twice the amount shown for the corresponding simple fracture or dislocations, but in no case more than 175.00

Unlisted Procedures

In addition to the procedures listed in this Schedule, amounts shall be payable for any other operations. The maximum amounts for

such procedures shall be determined by the Insurance Company in amounts consistent with those listed.

W. S. DOROUGH, M.D., Chairman.
Prepayment Medical Care Plans
Committee. 478 Peachtree St.,
N. E., Atlanta.

THE PAPANICOLAOU SMEAR: IN RETROSPECT AND FUTURE

When Dr. Papanicolaou first described his results with the exfoliated cell method for the rapid diagnosis of cancer, he almost caused a sensation in pathologic circles in the United States. The report largely concerned the diagnosis of cervical cancer and uterine malignancy; however, the process is applicable to finding cancerous cells from almost any site in the body, especially the lung, prostate, kidney and bladder.

After hearing Dr. Papanicolaou make a report in Chicago, we came away deeply impressed, and went on record as so stating, with a declaration that he was "an honest man and a master pathologist who had been working on this problem for twenty-five years." Later another statement was made in which we wondered where this method of diagnosis was going to lead us. Perhaps, we thought, we might eventually make the diagnosis of cancer on the morphology of single cells, which is not impossible at all.

However, since October 1943, much water has poured over the dam. Numerous pathologists here and abroad, and in many different clinics, have thoroughly tried the smear method of diagnosis. As a whole the results have been good and encouraging ones. Now comes a report in the January issue of the *Journal of the American Medical Association*, 28th instant, by Drs. Neiburgs and Pund of Augusta, Georgia, which to my mind is one of the most comprehensive published to date. The medical profession has confidence in these men, as they also most certainly do in Dr. Papanicolaou. We have known them for some time past, especially Dr. Pund with whom we served in World War I. He is one of America's outstanding pathologists.

The report by Neiburgs and Pund will allow us to come to some concrete decision as to the best use of Papanicolaous technic in the future. Briefly we gain these impressions from the article. They made a study for three years, making routine reports and smears on 10,000 women. Positive smears were found in 3.3 per cent. Histologic review of a large number of the women showed that 76 per cent had cancer, and that 3 per cent had borderline lesions. Twenty one per cent were *false positives*. Cancer, however, was discovered in 2.5 per cent of the entire group, with 40 per cent classified as having preinvasive types. We might here add that some outstanding clinics and pathologists do not recognize such an entity

as preinvasive malignancy.

An interesting statement may be well worth quoting from the paper: "From the evidence reported, it is apparent that this method should not be recommended as a diagnostic procedure. Its interpretation is difficult and unreliable for any one who has not been trained for at least one year with sufficient amount of material; furthermore, in view of the small number of cases detected the cost of diagnosis would be prohibitive if applied in this manner." Neiburgs and Pund also stated that it cost \$120 to \$150 to detect a case of preinvasive cancer.

Such conclusions from outstanding men with such a large amount of material are very stimulating. It is very difficult for a person to clearly define his reactions to a highly technical process like the Papanicolaou smear. Often-times one will examine such a slide and will be amazed with the simplicity and clarity and the easy diagnosis of cancer. A slide then later comes to the desk made from a young woman with little if any clinical disturbance, and one finds cells that make one apprehensive, and others that are probably not important. The pathologist therefore finds himself in a quandary. Somehow this situation might be compared to a fine salad made by a great chef, and notes the flavor and composition to be intriguing and almost perfect, yet leaves a somewhat disagreeable taste in one's mouth. It is therefore not entirely satisfactory, and leaves something to be desired. In this comparison the technic and the interpretation of the smear falls short of the information sought, especially so when compared to the information one may get from a properly cut and stained biopsy from a lesion at hand.

Therefore, we have come to the conclusion that Papanicolaou's smear method of cancer diagnosis should best be used as a *screening test* for cancer. It should be examined only by trained cytologists. The routine application of the test in doctors' offices and small clinics should be discouraged. The method cannot possibly replace the biopsy.

If in the future we find reason to alter our opinions as expressed above, we shall gladly do so.

JACK C. NORRIS, M.D.

HEALTHGRAMS

Tuberculosis rates are, it is agreed, among the most important indices of the state of the public health. The Right Hon. Walter Elliot, F.R.C.P., M.P., *British Medical Jour.*, August 6, 1949.

In the entire United States about 270,000 mental patients are coming back into the community each year. The spread of the disease from those who may have contracted tuberculosis while in mental hospitals therefore becomes a community problem which we cannot afford to ignore. *Pub. Health Rep.*, Jan. 7, 1949.

PRESIDENT'S PAGE

NEW OPPORTUNITIES AND RESPONSIBILITIES

The rapid extension of prepaid medical and hospital insurance in the State in the past few years will be augmented, now that satisfactory legislation for nonprofit plans has been enacted. The participants in these plans will naturally seek more medical and surgical attention than they did before. The quality of service rendered them will be a major factor in making voluntary health insurance a success and thereby acting as a definite factor in defeating plans to socialize medicine. We will have both the opportunity and the responsibility of rendering better medical service to a greater number of our people than in the past.

The opportunity to admit more patients to hospitals for diagnosis and treatment should be reflected in a higher rate of accurate diagnosis and cure, and a lessened period of disability in many cases. The ability of many people to have necessary elective surgery performed should not only increase their enjoyment of life, but also in many cases increase the scope of their employability and thereby increase their earning power. By centralizing a considerable proportion of his patients in one place, the doctor will be spared the time-wasting travel from one home to another and can devote more personal attention to each patient. However, there is a responsibility to see that use of hospitalization is not abused. Patients should be sent to hospitals when better care and service can be rendered them than they can receive at home. The ownership of an insurance policy should not influence the doctor to admit a patient to a hospital because it will be more convenient for him. Voluntary prepayment insurance can be destroyed by abuse and overuse in the same way that compulsory medical care in Great Britain has been reduced to a low degree of quality. Care should be taken that being free from the financial responsibility formerly faced when surgical procedures were con-

templated, the patient even though he seeks ill advised surgery will not receive it. This is far from being a hypothetical danger.

With large numbers of our patients covered by various forms of health insurance, we should not forget our responsibility to the unemployed or otherwise indigent patient. Careful study at the present time will show that a small percentage of the medical profession is taking care of a large majority of these patients. In many localities they are very inadequately cared for. This situation casts a reflection on the entire medical profession. It is the profession's responsibility to see that this condition is promptly and satisfactorily corrected.

All municipal and county hospitals should provide adequate space, facilities and nonprofessional personnel for outpatient clinics. The hospital boards and authorities should demand that every member of the staff devote the prorata amount of time necessary to make these clinics render the proper and needed service to the community's indigent sick. Where public funds maintain hospitals for his private patients a doctor should be more than willing to devote a small part of his time to the care of those members of the community unable to provide medical attention for themselves.

Every member of the medical profession should take the time and trouble to carefully and conscientiously consider all phases of the health and medical problems which confront him today. He should carefully and definitely decide what he considers essential for good medical practice. We are facing new conditions, new opportunities and new responsibilities. Our ability to properly understand and meet these new conditions cannot fail to have a profound influence on our future. The free practice of medicine is definitely on trial. It is in our power to make the verdict favorable.

ENOCH CALLAWAY, M.D.

THE JOURNAL

OF THE
MEDICAL ASSOCIATION OF GEORGIA

EDGAR D. SHANKS, M.D., Editor
478 Peachtree Street, N. E., Atlanta, Ga.

APRIL, 1950

SURVEY OF PHYSICIANS' INCOMES

Late in April the Bureau of Medical Economic Research of the American Medical Association and the Office of Business Economics of the U. S. Department of Commerce will jointly conduct a survey of physicians' incomes.

The Bureau has been authorized by the A.M.A. Board of Trustees to cooperate in this survey, which the Department of Commerce had planned to conduct alone. It will be the first full-scale survey by the department of physicians' incomes since 1941.

An analysis of the results will be published by the Department of Commerce next fall in its monthly publication, "Survey of Current Business." Its August 1949 and January 1950 issues had published similar analyses of surveys of incomes of dentists and lawyers, respectively, made jointly with the American Dental Association and the American Bar Association.

There is evidence that the national average in some surveys have been too high because physicians who do not have bookkeepers to fill out questionnaires do not reply in sufficient numbers. Accordingly, the Bureau emphasizes the importance of all doctors, especially those with a relatively small practice, filling out the questionnaires.

Accurate postwar data on physicians' incomes is badly needed in order to develop better estimates of how much the American people pay to physicians.

Every physician can be assured that the survey has no relation whatever to the operations of the U. S. Bureau of Internal Revenue. There is no way by which the Department of Commerce could have obtained the needed information from the Bureau of Internal Revenue: hence, the questionnaire survey.

There will be two questionnaire forms. The Bureau of Medical Economic Research helped to design these. A short form will request income data for 1949 only. A long form questionnaire will cover the years 1945 through 1949. All are to be returned unsigned in franked envelopes.

The punch card files of the Bureau of Medical Economic Research contain the names of about 200,000 physicians. The survey will cover 125,000 of these, or 62½ per cent of the total. Selection will be by a formula which eliminates any partiality.

A short form will be sent once only to *every other* name in the file. Of the remaining 100,000 names, every fourth will be selected. To these will go 10,000 short forms and 15,000 long forms, with this distinction—the return franked envelopes will carry a code number which will identify the physician to the Bureau of Medical Economic Research alone. All of the addressing will be done in the headquarters of the A.M.A.

The sole purpose of the code number is to enable the Bureau of Medical Economic Research to address a follow-up letter to those not replying to the first request. Physicians need have no suspicion about the code number because when the reply is received, the questionnaire will be separated immediately from the envelope and the identity will be lost.

Physicians will be doing the medical profession a service by filling out the forms and returning them as soon as possible.

STATEMENT BY JAMES E. PAULLIN, M.D., ON H.R. 6000 -SUBMITTED TO THE SENATE COMMITTEE ON FINANCE

February 28, 1950

To identify myself, I am James Edgar Paullin M.D., of Atlanta, Georgia, a duly licensed physician engaged in the active practice of medicine in Atlanta for the past 40 years. At the same time I have been a part-time teacher in the Medical Department of Emory University. I am a member in good standing of our local, state, and national medical societies, and during my years in practice, at one time or another, I have held offices of responsibility in these organizations. I desire to appear before your Committee as a member of the medical profession opposing in particular that part of H.R. 6000, Section 107, which relates to the inclusion among its provisions of total and permanent disability insurance benefits.

In reading the amendments which have been offered to the Social Security Act under H.R. 6000 I was amazed at the recommendations for increased appropriations in money which are requested to be given as benefits under the various titles of the bill, as well as to increase the numbers concerned. So far as I could tell, the requests for money to support this program were increased tremendously, none were eliminated, and none were decreased. Naturally the question arose in my mind as to how all of these benefits could be undertaken without increasing the tax burden on the productivity of our citizens to meet the increasing demands for assistance, and why our citizens are willing to allow Uncle Sam to assume responsibility for their support, education, health, housing, and retirement without the necessity of any effort on their part to produce income from which these taxes are to be paid. I have not given all provisions of the Act careful study, and if I had I would not be com-

petent to offer valid testimony concerning them. However, I do have experience and observations concerning total and permanent disability, which is Section 107 in H.R. 6000, and which will involve the expenditure of millions upon millions of dollars as a part of the Social Security program.

I do not believe that anyone would oppose rendering assistance to those in dire distress or who are in great need and who are not financially able to help themselves, either because of sickness, injury, or disease. However, the actual need must be established, with a *primary* interest centered on a program which would rehabilitate the person or persons disabled in an effort to make them self-supporting members of society. This must be the chief purpose for which contributions are made for aiding this group of our citizens. To those of us who have been in the active practice of medicine for any considerable number of years, we are aware that there are many psychological factors demanding consideration in any discussion of the determination of the presence or absence of disability.

First, if a tax is levied for the purpose of furnishing total and permanent disability insurance for an individual, and if the individual pays for it for a certain length of time, he develops the feeling that he has a right, under certain circumstances, to demand the benefits which he has purchased. In other words, there is an honest psychological approach on the part of the person with disability insurance to demand support even though he is conscious that he is not totally and permanently disabled. If there is written into the law a clear statement defining disability, either total or permanent, and if the insured does not completely qualify for these benefits, if he sees or hears of some one with no more disability than he has drawing benefits for disability, he makes an earnest effort to affect total disability in order to collect his pay check.

The second psychological effect of disability is that the patient who claims disability benefits makes an effort to satisfy his own conscience as to the justice of his demands, and he develops subjective symptoms of disease which no one can demonstrate as non-existent. Particularly is this true with certain types of individuals who are, to some extent, emotionally unstable. Such a condition occurs in a higher percentage among women than among men. We as physicians know that disappointments, frustrations, emotional instability, ill-adjusted family life, and various other situational and environmental difficulties will cause in some people a reaction of *defeatism*, with the development of more subjective complaints, which the patient cannot adequately describe, if given an opportunity, in an all day rehearsal of his ailments, and which, if they were the result of disease, would prove fatal before the narrative could be finished.

Third, if a person is insured by the Federal Government against disability and can draw a nice pay check each month for his disability, in a complaining individual as above described, the stage is set for the making of a complete, permanent, 14-carat invalid who is totally disabled, and who will resist with vehemence any and all efforts toward rehabilitation.

Within the past 20 years I think all of us have become conscious that the present trend of society is leading to a steady and gradual weakening, and even disintegration, of our moral and spiritual consciousness, and with it, unfortunately, the deliberate surrendering of individual initiative, ambition, and a desire to succeed in any undertaking, for a paltry mess of pottage served by a paternalistic government. The development of this type of philosophy, among an otherwise healthy citizenship, weakens the very foundation of that type of citizen who has made this government possible, and will greatly increase the demands for government benefits which, in times of stress and strain, will be greatly increased and force our people into a moral state of indolence, and our national economy into a state of bankruptcy.

I ask those of you who visit among your constituents to observe the tremendous increase in the members of our population who are looking for a *position* and not for a job, a position they consider ornamental to a business without the assumption of any tremendous amount of responsibility, and which could be used to enhance the business because of their supposedly striking qualifications and their ability to draw a nice pay check. Those who seek a job are people who are willing to work, who glory in the accomplishment of a task, and who are happy to be productive. These are few in number. Evidence of this belief can be obtained by spending a few hours visiting any of the employment agencies.

Fourth, physicians have little sympathy with this point of view since they not only work "when willing and able, but also without a contract." They go on call both day and night, irrespective of a national emergency, to render service to the rich, to the poor, and to all of our citizens, regardless of race, creed, or religion. They are conscious of demands which are made upon them, and which will be increasingly made if the provisions of this Act are passed, for certification as to presence of total and permanent disability which does not exist. It takes a physician of considerable stamina to be able to resist some of these appeals. And sometimes they will not do so.

Some 20 or 25 years ago many large insurance companies issued policies on a great number of people, covering them for total and permanent disability. During prosperous times the insurance companies made money on this type of contract. When the sailing became a little rough, a

great many physicians will recall, considerable numbers of patients so insured demanded to be classed as permanently and totally disabled so they could retire from business and receive a tax-free income which was sufficient for them to enjoy the art of living without any of the responsibilities, restrictions, or obligations connected with the honorable profession of work. I am not referring in this statement to those patients who obviously suffered a disability which prevented them from working. But I am referring to that large group which developed only subjective complaints, such as nervous disorders, headaches, backaches, rheumatism, angina pectoris, and other disorders which could not in the slightest degree be detected by physical or other examinations. These people, many of them, had persuaded themselves that they were sick and disabled. Many of them could not do the slightest thing, if such was called work, but much could be done under the name of pleasure, such as fishing, skeet shooting, piloting a boat, bird hunting, ten-cent poker, and other pleasures which would perhaps require no physical exercise but which might increase their blood pressure, and be indulged in without damaging their chances of living provided no work was involved.

The depression, which came along in the thirties, also caused many people in a different financial bracket, insured under a group policy, to seek the security of a permanent and total disability. All of this illustrates the point that when the field is made fertile for the development of dependency on some agency or carrier other than the patients' own efforts, they naturally seek the course of least resistance and demand help from other sources. The experience of life insurance companies, if studied, would be most interesting because I do not believe that the underwriters have been at all successful in removing from their payroll any of those who are collecting for total and permanent disability, except by death, and the mortality is quite low for the disease causing the disability.

It is my belief that unemployment (which is liable to increase in this country) from a psychological standpoint will cause the development of a great many subjective symptoms which could be classed as rendering a patient totally and permanently disabled. It is true that with stimuli such as this, and others, it is almost next to impossible to determine total disability in a patient who has made up his mind and is determined to prove that he is totally disabled in order to obtain a life income from the Federal Government.

A great number of women are employed, some 13,000,000, many of whom probably would qualify for benefits under the proposed program. It is realized by those who are engaged in the practice of medicine that this would be a most difficult group to properly evaluate their claims for disability.

There are other pitfalls which could be brought to your attention, but I believe the idea has been developed from a practical standpoint sufficiently to warn the Congress of what a disastrous step it will be to our national economy to write into the Social Security Act any such program as that recommended in H.R. 6000, Section 107, for total and permanent disability. Social Security funds should necessarily be limited in amount; they represent taxes which are drained from the producers of the nation. Unless there is some limitation on the fantastic demands for funds, our national economic health will be thrown tremendously out of balance and a fatal condition of shock develop from which there is no recovery.

Since it has been very clearly shown that cash disability benefits diminish the incentive towards rehabilitation, self-reliance, and self-maintenance, which is extremely undesirable, it seems to me that the emphasis, and any consideration which is given to this program, should be focused on rehabilitation. This cannot be done successfully in my opinion under Federal control. All of the states, insofar as I know, have agencies which are capable of handling individuals who claim disability, such as the State Welfare Agencies. These agencies are on the ground. They know of the individual who applies for assistance. They have an opportunity to investigate their worthiness, and they have facilities for rehabilitation. They are also capable of finding work for him or her, and determining whether treatment at home, in an institution, or in other places is the most desirable. Please let them handle it.

I therefore respectfully request that this part of the program, Section 107, be eliminated in the Social Security amendment to H. R. 6000 since its adoption, in my opinion, will lead to the development of a considerable number of malingering and semi-invalid individuals among many of our worthwhile citizens. It would mean a further encroachment upon States' Rights, and the building up of Federal payrolls which would be used for political influence in the handling of claims. It matters not what safeguards are taken to write into the law those who would be eligible for insurance, all of us know that after a short space of time no attention is paid to this law, just as is happening in other phases of the Social Security program and in the treatment of veterans in VA hospitals. It is common knowledge that veterans with non-service-connected disabilities who are perfectly able to pay for hospital care and medical service are being treated at considerable public expense when the law specifies under what conditions they should be beneficiaries of this service. The same could, in my opinion, happen with those drawing compensation for total and permanent disability benefits.

FIND 50,000 IN LOS ANGELES AREA HAVE BEEN INFECTED WITH Q FEVER

More than 50,000 persons in the Los Angeles area probably have been infected during recent years with the microbe that causes Q fever, according to a report in the March 25 *Journal of the American Medical Association*.

The study was made by Dr. Joseph A. Bell, medical director of the Laboratory of Infectious Diseases, Microbiological Institute, National Institutes of Health, Bethesda, Md.; Dr. Robert J. Huebner, senior surgeon, U. S. Public Health Service, Bethesda; and M. Dorothy Beck, senior epidemiologist of the California State Department of Public Health, Berkeley, Calif.

The disease which was found to occur in the metropolitan area of Los Angeles in 1947, is commonly characterized by headache, high fever, severe sweats, and pneumonia-like changes in the lungs which can be seen on x-ray films, according to the report. Infection with the microbe occasionally produces no recognizable illness, often a mild to moderate illness of about one week's duration and not uncommonly a severe illness for three or more weeks. Nine deaths from Q fever have been reported.

Nearly 10,000 persons in Los Angeles and the surrounding area were given a laboratory test which indicates whether recent infection with the Q fever microbe has been present. The percentage of positive results from the test in the first three groups (persons applying for routine premarital examinations, persons drinking raw milk and those working in aircraft manufacturing plants) was 1.36 per cent.

"If this percentage is applied to the total population, it indicates that more than 50,000 persons in Los Angeles have been infected during the past several years," the report says.

Each of the other 12 groups was selected so as to have a disproportionately large number of persons who had some type of association with livestock or their raw products. The percentage of positive reactions in these groups varies from nearly 4 per cent in packing plants to 23 per cent in dairy workers.

In all of the various groups, persons who had used raw milk at any time since 1941 had a higher percentage of positive reactions than those who had not. These consistent differences still obtained after allowance was made for the influence of other factors.

"It appears that a sizable proportion of these (50,000) infections caused many persons to have an acute illness with fever for two or more days which was not heretofore recognized as Q fever," the report says.

"The most frequent and by far the most important sources of human infection were local dairy cows, their very young calves and some of their raw products, particularly raw milk

and hides.

"The persons most apt to have been infected were those who had used raw milk in their households, those whose residence had been located near a dairy or livestock yard, and those who had worked in industries handling live or recently killed local dairy cows and young calves (employees of dairies, meat-packing, fat-rendering and hide plants and creameries)."

An analysis of 300 cases found in Los Angeles showed that human cases are rarely if ever direct sources of infection for other persons and that insects play little if any role in the spread of the disease to human beings, the researchers point out.

FIND BLOOD TEST FOR CANCER NOT SUITABLE FOR DIAGNOSIS AT PRESENT

The Huggins-Miller-Jensen blood test for cancer does not appear suitable at present as a diagnostic test, in the opinion of two researchers from the Department of Experimental Pathology, Quincy (Mass.) City Hospital.

The test, based on albumin disturbance in cancer patients, was first reported about a year ago by Dr. Charles B. Huggins of the University of Chicago.

The diagnostic value of the procedure followed by Dr. Huggins and his co-workers was tested by Dr. Otakar J. Pollak and Adeline Leonard, B. S. Their report on test results from blood serums from 80 patients with proved malignant growth and on control serums from 170 patients appears in the March 25 *Journal of the American Medical Association*.

In seven of the 80 patients with proved malignant growth, the test failed to indicate the presence of cancer, the researchers say. In 23 of the 170 persons in whom malignant growth was excluded on the basis of clinical signs and laboratory and x-ray study, the test indicated malignancy. The total number of false reactions in the series of 250 persons was 30 (12 per cent).

"At the present time, this reaction is not suitable as a diagnostic test," the researchers point out. "Further investigation might bring about the development of a reaction the result of which would show better correlation with disease."

CITES DESIRABILITY OF BREAST FEEDING OF BABIES

Most mothers can give their babies the nutritional and emotional benefits of breast feeding, a doctor who made a study of methods of breast feeding reports.

Various demonstrations have proved convincingly that almost any mother who wants to can breast feed her baby as long as she and her doctor desire, says Dr. Frank Howard Richardson of Asheville, N. C., and the Children's Clinic, Black Mountain, N. C., in the March 25 *Journal of the American Medical Association*.

Breast feeding has been shown to reduce mortality and sickness percentages, enhance immunity to gastrointestinal and respiratory diseases and contribute emotional benefits claimed by psychologists for mother and baby alike. Dr. Richardson points out.

FIND ETHYL ALCOHOL UNSATISFACTORY DISINFECTANT FOR WOUNDS

Ethyl alcohol, the ordinary alcohol of commerce and pharmacy, should not be used as a disinfectant in wounds or on raw surfaces of injured areas, according to a Salt Lake City doctor who made a study of the substance.

The antibacterial action of ethyl alcohol is neutralized by proteins present in the wound, says Dr. Philip B. Price of the University of Utah College of Medicine. Dr. Price's report appears in the March issue of *Archives of Surgery*, published by the American Medical Association.

Further, the alcohol is painful, injures wound tissues and delays wound healing, Dr. Price points out.

Simple solutions of ethyl alcohol are not satisfactory agents for cold sterilization of surgical instruments, Dr. Price also found.

Seventy per cent alcohol (by weight) in water, however, is still believed to be the "solution of choice" for disinfection of the skin, he says. On healthy skin, this solution is powerfully destructive to germs and harmless to the body.

MEDICINE'S ROLE IN CIVIL DEFENSE TO BE DISCUSSED

The role of medicine in a nationwide civil defense program will be discussed at the semi-annual meeting of the Council on National Emergency Medical Service of the American Medical Association, May 6.

The meeting, to be held in the A.M.A. headquarters, 535 North Dearborn Street, Chicago, will be attended by representatives of state and territorial medical associations, according to Dr. Robert M. Hall, Chicago, council secretary.

A tentative agenda calls for discussions, with recognized authorities, of various civil defense aspects of atomic, chemical and psychological warfare, and the presentation of experiences of states and communities that already have developed programs to cope with disasters of all types. Among states which have progressed in that direction is Maine. Its program and that of others will be discussed in roundtable forums.

Also to be considered are the Atomic Energy Commission's program for the indoctrination of the entire physician population in the medical aspects of atomic warfare and the implementation of this program by the various medical societies.

The civil defense problems facing both urban and rural areas will be outlined.

NO PREVENTIVE OF GRAY HAIR, SAYS MEDICAL AUTHORITY

An agent which will prevent the graying of hair of human beings is as yet unknown, says a medical consultant in the March 25 *Journal of the American Medical Association*.

"Sometime ago it was suggested that both pantothenic acid and para-aminobenzoic acid might prove to be anticanitic (opposed to graying of hair) agents because they seemingly prevented the graying of hair in laboratory rats," he writes. "However, they have had no such effect on humans."

ELECTRON MICROSCOPE PROVING BIG AID IN MEDICAL RESEARCH

Solutions to some of the vexing problems before medical researchers may be reached through the use of the electron microscope, in the editorial opinion of the March 25 *Journal of the American Medical Association*.

"Where future research with these microscopes will lead remains to be seen, but there is assurance that if the future findings are as exciting as those of the past few years they will be astounding," says the editorial.

It points out that there is need for precision techniques in the field of microscopic exploration. The electron microscope, which because of its size appears to be built upside down, is being used in the study of plant and animal viruses and of bacteriophages, an ultramicroscopic bacteria-destroying agent.

"The importance of studying the virus (or viruses) responsible for anterior poliomyelitis (inflammation of the gray substance of the spinal cord), influenza viruses, viruses of the pox group and other disease-producing organisms cannot be stressed too strongly," says the editorial.

"One important aspect of the observations made with the electron microscope is the different way in which bacteria and viruses may behave in their living and dying processes. When these variations are better understood it may be possible to explain some of the peculiar differences that arise in clinical problems."

The electron microscope in spite of its cost is becoming more familiar to researchers in the medical, biologic and industrial fields. Electrons are accelerated electrically between a filament and a condenser to a high speed or energy. The microscope is a high vacuum instrument to prevent a collision of these electrons with air molecules. Specimens required for electron microscopy are much thinner than those used in the conventional optical microscopes.

Although the use of the instrument is not limited to bacteriology and virology, its more apparent usefulness for those concerned with health problems lies in these fields, says the editorial.

U. S. RANKS WITH LEADING NATIONS IN PREVENTING INFANT DEATHS

Rapid strides in improving and applying medical technics of caring for babies have made the United States practically equal to any other nation in the world in preventing infant deaths, an American Medical Association study shows.

The study, which was recently completed by Frank G. Dickinson, Ph.D., and Everett L. Welker, Ph.D., Chicago, of the A.M.A. Bureau of

Medical Economic Research, and published as Bulletin 73, is summarized in the April 1 *Journal of the Association*.

One reason for the marked improvement in this country's infant death rate is that in recent years the two diseases which are the major causes of deaths of babies over one month and under one year—pneumonia and infant diarrhea—have largely been conquered in most sections of the United States, according to Dr. Dickinson.

This medical advance has brought about a reduction in deaths of babies from six months to a year of age, he said. During 1946, the latest year for which specific information is available, the United States had the world's lowest infant death rate for this age group.

The difference between the infant death rates of this country and New Zealand, the leader, for the first month of life is largely a statistical illusion, the study shows. Differences between the definitions and rules of the two countries regarding stillbirths and early infant deaths explain two thirds of the difference between the current total infant death rates of the two countries.

Also, the United States includes in its computation of infant death rates the infant deaths among all racial groups, a fact which helped to give Arizona, New Mexico and Texas, where numbers of American Indians and persons of Spanish-American (Mexican) descent are found, the highest total infant death rates for 1948 in the nation. New Zealand excludes infant deaths among its native Maoris.

The decline in infant deaths in the United States during the last 15 years has been very great. Since the middle 1930's, the infant death rate for the United States declined from 56 in 1935 to 32 in 1947, while the rate for New Zealand declined from 32 to 25, Dr. Dickinson said.

TOWARD EFFECTIVE CANCER CONTROL

Nowhere in the world do voluntary health agencies flourish in such abundance as they do in the United States. They are an expression of the charitableness of our people toward those less fortunate, and they are testimony to the democratic spirit of Americans in organizing and working cooperatively for the common good.

The American Cancer Society, a venerable member of the family of health agencies, should be thoroughly known to all doctors for its services are many. Through its national office in New York, its 61 chartered divisions and 2,613 county branches, it conducts a broad-based year-round effort to control cancer, one of the foremost medical problems confronting us.

The control of cancer eventually will come through an understanding of cancer's causes, means of prevention and effective treatment methods; this knowledge waits on research. The Society has recognized the importance of intensified investigative efforts in the field of growth and

spends 25 per cent of its income in the support of such studies and in the training of young scientists to carry them forward. During the present year this support amounts to \$3,500,000. The total research expenditure for the past five years is \$13,153,560.

A substantial measure of control over cancer can be achieved today with the knowledge already at hand. The disparity between cancer's *curability* and the cures being achieved is striking. For example, cancer of the breast is curable in 80 per cent of patients who are treated when the disease is confined to the breast; yet the country-wide cure rate is less than 35 per cent. When cancer of the rectum is confined to the mucosa, cure rates of 70 per cent have been reported; yet the overall rate of cure is about 11 per cent. Similar differences hold for most forms of the disease. In order to achieve a larger measure of cures, the American Cancer Society engages in an intensive educational and publicity campaign, based on knowledge of cancer's early signs and symptoms (the Danger Signals), and the value of periodic physical examinations.

April is the month when the American Cancer Society makes its annual appeal to the public for support of its programs. As more and more of our people live longer, the incidence of cancer increases. As the problem becomes more widespread, so must the effort to control the disease be intensified. The Society is dedicated to the principle that through education and research an effective measure of cancer control may be achieved at this time.

Improved services to patients with cancer are provided by support of cancer clinics, organized programs of cancer detection and information services; these efforts are augmented by a corps of volunteers who provide loan closets, transportation services, recreational activities and dressings.

Of immediate interest to doctors is the professional education program. During the past year, three monographs of a series dealing with cancer by anatomic site have been distributed to practicing physicians throughout the country. The series will be continued this year, with distribution at three-month intervals.

The professional journal *Cancer*, which first appeared in May, 1948, has been well received by clinicians and investigators interested in the problems of abnormal growth. A series of motion pictures for professional audiences, treating the problems of early diagnosis of cancer by anatomic site, has been outlined. Two of the films have been released, the first concerned with the general problem of the early diagnosis of cancer and the second concerned specifically with the early diagnosis of cancer of the breast. A third, covering cancer of the gastro-intestinal tract, is in preparation and will be released this year.

A new publication of the Society will appear this year, and will be distributed bi-monthly to practicing physicians throughout the country. Topics of interest to the general practitioner will be presented in digest form, together with brief abstracts of significant papers appearing in the literature. Clarity, brevity and general interest will be stressed. It is the Society's hope that this digest will be accepted by the busy physician for whom it is planned.

The library of the Society publishes monthly a bibliography of the current cancer literature which is available on request to physicians, research workers and libraries. The library will prepare, on request, bibliographies on any topic related to the field of cancer. A package lending library has been established which will supply reprints, on a loan basis, to any physician or investigator requesting the service.

CHARLES S. CAMERON, M.D.
Medical and Scientific Director
American Cancer Society.

USE AUREOMYCIN AGAINST INFLUENZAL MENINGITIS

Favorable results from treating seven patients for influenzal meningitis with aureomycin are reported by a group of doctors from the University of Maryland School of Medicine, Baltimore.

The disease is an infection of the membranes which envelop the brain and spinal cord and is not caused by the microbe responsible for ordinary influenza.

"Aureomycin therapy was followed by fall of temperature to normal levels within 96 hours after the initial dose," Drs. Miles E. Drake, J. Edmund Bradley, Jerome Imburg, Fred R. McCrumb, Jr., and Theodore E. Woodward write in the February 18 *Journal of the American Medical Association*.

"On the third day of treatment, abatement of such symptoms as mental dullness and convulsions was definite," the doctors say. "On the fifth day, the acute phase of illness had completely disappeared. The patients were plainly convalescent, with increased strength and return of appetite."

Former treatments for the disease, including administration of sulfa drugs and streptomycin, possess "clearly defined disadvantages," the doctors point out, adding:

"Clinical trial of aureomycin in these cases has led us to believe that it may represent a highly effective method of therapy in this type of infection."

ST. VITUS' DANCE

Chorea, or popularly called St. Vitus' Dance, is a condition marked chiefly by lack of coordination throughout the body generally, resulting in jerky, purposeless movements and causing the victim very often to harm himself if not closely watched, the Educational Com-

mittee of the Illinois State Medical Society observes in a Health Talk.

A disease of the nervous system, the condition was once known as the "Dancing Mania." Its name "St. Vitus' Dance" comes from the patron saint of the sufferers of the disease, said to arise from a legend of the fourteenth century. In 1686, Sydenham, an English physician, described the condition; hence the name Sydenham's chorea.

Generally believed to be caused by a germ of the streptococcus type, chorea is definitely related to rheumatic fever. In both the heart may be affected. It chiefly attacks the age group five to fifteen, and girls more often than boys.

Apparently the causative agent gets in the brain and nervous system, accounting for the characteristic symptoms of nervousness and a "fidgety" lack of muscle control. Inability to coordinate is also manifested by stumbling, jerking, a shaking inability to button clothes or pick up objects because of the shaking of the arms and hands.

The strange jerky movements are apparently all different in character, since no two seem to be alike. The twitching will range from a slight tremor to almost violent movements. When the facial muscles are affected, the distortions are indeed a pathetic sight.

It is difficult to say when the disease starts. There may be dizziness, headache, vomiting and even a slight fever before the jerky, purposeless movements appear. Weakness, awkwardness, listlessness, restlessness, inability to pay attention are other signs.

Rest in bed is important for the child with chorea. He should be watched very carefully, since very often he can harm himself by the spasmodic movements, particularly if he throws himself out of bed as frequently occurs, or striking his head, a leg or arm against the bedpost or a wall.

The attitude to the victim of chorea should be soothing and comforting, since there is a tendency to emotional imbalance. The patient is aware of his spasmodic "thrashing about." He becomes oversensitive and irritable.

The sufferer should be supervised closely by a physician who, very often, can prescribe certain medicines that will tend to make the purposeless movements less violent, obviating the chances of producing physical harm.

Convalescence generally requires from two to six months. The diet should be nourishing and contain ample fluids. After care should include adequate diet, controlled exercise and play. These coupled with proper relaxation and rest should prevent any permanent damage to the victim of St. Vitus' Dance.

THUMBSUCKING

A parent who attempts to break his child of thumbsucking by scolding, or even coaxing, is not using good judgment. Either practice can be harmful because it denotes a lack of everyday common sense in rearing a child, the Educational Committee of the Illinois State Medical Society advises in a Health Talk.

A child's first automatic sense of comfort is through sucking. Whether breast or bottle fed, sucking satisfies his hunger, and it isn't long before he discovers that the thumb is a handy gadget for his mouth and thus is established the thumbsucking habit. Very often the habit suggests that the baby is not getting enough sucking—perhaps he has been taken away too soon from the breast or the bottle, or again he has been put on a nursing schedule that allows too few nursing periods. In any event, the child derives comfort from his sucking, an important factor in why he does it.

As the child grows older, he usually resorts to sucking his thumb to fill an emotional need. Feeling unwanted and alone may be responsible, so he seeks to satisfy himself. Unhappiness, fear and insecurity are emotional problems that loom high on a child's horizon.

It is generally conceded that up to the first few years, thumbsucking may be considered normal with the habit

acting as a sort of pacifier or comforter. A child's curiosity is an ever present wonder. The more he explores the new things about him, the more his mind is taken from himself. Usually by the time he reaches the wonders of his five to six years of age world, the thumbsucking habit is forgotten.

If the practice continues beyond this age, however, definite steps for correction should be undertaken by consulting with your physician. In the very young child, it is unlikely that much pressure will be exerted against the roof of the mouth or on the jaws. However, as the child grows older, it is possible to exert greater pressure which, in many cases, may result in some structural defects of the jaws. And then again, in an older child the habit suggests an emotional need, a gap that should be filled to insure normal mental growth.

Thumbsucking is often associated with going to sleep. Parents dislike seeing their children grow up too soon, yet many will berate them for being afraid of the dark or being left alone in the room. They scold these youngsters for not being "grown up," and for having baby fears. Instead of threatening, why not concede a little, so that the child understands you are trying to help overcome these fears?

Shaming, threatening, scolding and conversely bribing and coaxing are all methods used in the correction of thumbsucking. Unfortunately, the application of bitter solutions, splints and other restraints are also tried.

Wise parents will understand that thumbsucking is a normal practice for the very young and that the child will stop it unconsciously as he grows older. They will understand too that, in addition to food and clothing, a good share of affection and love are essential to meet the youngster's emotional needs.

Notice when your child sucks his thumb, don't call attention to it, but try to understand the circumstances surrounding the action. Then try to attract his interest by creating new and happy situations and satisfactions.

WHAT IS NEUROLOGY?

Many persons are confused by the terms neurology and psychiatry and yet in understanding the definitions a great distinction is noted between the two fields of medicine, the Educational Committee of the Illinois State Medical Society observes in a Health Talk.

Neurology covers the physical diseases that affect the entire nervous system which includes the brain, its connecting spinal cord, located in the spine itself, and the many nerves extending from the spinal cord to various parts of the body.

Psychiatry deals with the emotional or mental disturbances of the mind, stirred up in the brain and related to the mind itself through thoughts, attitudes and behavior patterns.

Thus the nervous system is a complex structure of wiring that may be compared to a telephone system. The brain is the central office where all communications are received and sent. In other words, if we touch something, see an object, whether unconsciously or deliberately, a group of nerves goes into action on a message from the brain. Certain sections of the brain are charged with different responsibilities, so that actually to reach for the object a group of nerves directs the muscles necessary to bring up the arm and hand to pick up the object. In the same manner, your eyes notice a person or an object falling toward you. They in turn send the message to the central office in the brain. Again the relay is started, the nerves to the muscles and up come the arms to ward off the falling object.

When an infection, injury, disease or growth affects any part of the nervous system, one result is noticed and that is an interference in the telephone system, causing a blocking in the service. Thus if a certain part of the brain is affected, the result may be hemiplegia or paralysis of one side of the body. If, however, another part of the brain is affected, or a part of the connecting link—the spinal cord—the person may lose the use of both legs, a condition known as paraplegia. If the back part of the brain is affected, called the cerebellum, a

condition develops known as ataxia and is evidenced by lack of muscular coordination. The victim will walk in a weaving fashion, much like a person does who is intoxicated.

These are some conditions that occur when the brain is affected. In the same manner when the nerves or wiring system are attacked, again interference in the telephone service is noted. If one nerve is affected, we may have neuritis, or if many nerves are involved, the result may be multiple or polynneuritis.

Nutritional deficiencies may be the cause, or the taking of medicines either advertised or perhaps recommended by a friend. Thus self-diagnosis or self-medication may lead to the development of some form of neuritis, which will affect the telephone wires in various parts of the body. As a result, the individual may lose the use of his hands or feet, known as wrist and foot drop, respectively.

When the nervous system is functioning normally, the reflexes are normal. Many different tests are performed to determine whether an interference in the nervous system is present. For example, a tapping at a certain place beneath the knee will cause the foot to jerk involuntarily, which is the normal reflex action. In certain conditions where the wire system is disturbed the patient will not feel the stick of a pin.

And so in neurology the physical changes of the nervous system are studied and by a series of tests it is possible to check the patient's sensibility, thus establishing the area or site involved.

COUNTIES REPORTING FOR 1950

Bartow County Medical Society

President—Charles L. Ellis, Kingston
Vice-President—H. B. Bradford, Cartersville
Secretary-Treasurer—A. L. Horton, Cartersville
Censors—S. M. Howell, Wm. B. Quillian, Jr., and H. B. Bradford

* * *

Ben Hill County Medical Society

President—Francis Ward, Fitzgerald
Vice-President—G. K. Cornwell, Fitzgerald
Secretary-Treasurer—W. P. Coffee, Fitzgerald
Delegate—Roy Johnson, Jr., Fitzgerald
Alternate Delegate—D. B. Ware, Fitzgerald
Censors—G. W. Willis, W. D. Willcox and J. E. Smith

* * *

Bibb County Medical Society

President—C. H. Richardson, Jr., Macon
President-Elect—Robert W. Edenfield, Macon
Vice-President—John I. Hall, Macon
Secretary-Treasurer—Henry H. Tift, Macon
Delegate—J. D. Applewhite, Macon
Delegate—J. B. Kay, Byron
Alternate Delegate—C. N. Wasden, Macon
Alternate Delegate—W. W. Baxley, Macon
Censor—W. W. Baxley, Macon

* * *

Blac Ridge Medical Society

Fannin-Gilmer-Union Counties

President—Courtney C. Brooks, Blac Ridge
Vice-President—James F. O'Daniel, Ellijay
Secretary-Treasurer—Thomas J. Hicks, McCaysville
Delegate—Thomas J. Hicks, McCaysville
Alternate Delegate—James F. O'Daniel, Ellijay
Censors—Ed W. Watkins, James F. O'Daniel and Thomas J. Hicks

* * *

Chattooga County Medical Society

President—John J. Allen, Trion
Vice-President—Wm. T. Gist, Summerville
Secretary-Treasurer—Hugh A. Goodwin, Summerville
Delegate—G. H. Little, Trion

* * *

Cherokee-Pickens Medical Society

President—E. A. Roper, Jasper
Vice-President—Charles R. Andrews, Jr., Canton
Secretary-Treasurer—A. M. Hendrix, Canton
Delegate—C. J. Roper, Jasper
Censors—Grady N. Coker, T. J. Vansant, and Ben K. Looper

Clarke County Medical Society

President—J. B. Neighbors, Jr., Athens
 Vice-President—Linton Gerdine, Athens
 Secretary-Treasurer—William H. Bonner, Athens
 Delegate—Marion A. Hubert, Athens

* * *

Colquitt County Medical Society

President—R. E. Stegall, Moultrie
 Vice-President—John F. McCoy, Moultrie
 Secretary-Treasurer—Robert E. Fokes, Jr., Moultrie
 Delegate—John F. McCoy, Moultrie
 Alternate Delegate—R. E. Stegall, Moultrie
 Censors—A. G. Funderburk, Edgar C. Holmes, and
 R. M. Joiner

* * *

Coweta County Medical Society

President—Joseph W. Parks, Jr., Newnan
 Vice-President—J. O. St. John, Newnan
 Secretary-Treasurer—N. B. Glover, Newnan
 Delegate—H. D. Meaders, Newnan
 Alternate Delegate—G. W. Hammond, Newnan

* * *

Crisp County Medical Society

President—C. E. McArthur, Cordele
 Secretary-Treasurer—O. T. Gower, Jr., Cordele
 Delegate—P. L. Williams, Cordele
 Alternate Delegate—C. E. McArthur, Cordele

* * *

Decatur-Seminole Medical Society

President—Henry A. Bridges, Bainbridge
 Vice-President—Carl B. Welch, Attapulgus
 Secretary-Treasurer—M. A. Ehrlich, Bainbridge
 Delegate—Harry B. Baxley, Donalsonville
 Alternate Delegate—John P. Tucker, Bainbridge

* * *

DeKalb County Medical Society

President—Lawrence P. Matthews, Atlanta
 Vice-President—H. Homer Allen, Decatur
 Secretary-Treasurer—F. C. Powell, Decatur
 Delegate—John T. Leslie, Decatur
 Alternate Delegate—W. A. Mendenhall, Chamblee

* * *

Dooly County Medical Society

President—O. K. Coleman, Vienna
 Secretary-Treasurer—Martin L. Malloy, Vienna
 Delegate—O. K. Coleman, Vienna
 Alternate Delegate—Martin L. Malloy, Vienna

* * *

Floyd County Medical Society

President—Edward L. Bosworth, Rome
 Vice-President—Lee H. Battle, Jr., Rome
 Secretary-Treasurer—Russell E. Andrews, Jr., Rome
 Delegate—Lee H. Battle, Jr., Rome
 Censors—John T. McCall, Warren M. Gilbert, and
 Ralph B. McCord

* * *

Hancock County Medical Society

President—Horace Darden, Sparta
 Vice-President—C. S. Jernigan, Sparta
 Secretary-Treasurer—H. L. Earl, Sparta
 Delegate—C. S. Jernigan, Sparta

* * *

Houston-Peach Medical Society

Secretary-Treasurer—A. G. Hendrick, Perry
 Delegate—A. Smoak Marshall, Fort Valley
 Alternate Delegate—A. G. Hendrick, Perry

* * *

Lamar County Medical Society

President—J. H. Jackson, Barnesville
 Vice-President—D. W. Pritchett, Barnesville
 Secretary-Treasurer—S. B. Traylor, Barnesville
 Delegate—J. A. Corry, Barnesville

* * *

Laurens County Medical Society

President—M. Fernan-Nunez, Dublin
 Vice-President—Charles A. Hodges, Dublin
 Secretary-Treasurer—O. H. Cheek, Dublin
 Delegate—Tyrus R. Cobb, Jr., Dublin

Alternate Delegate—Charles A. Hodges, Dublin
 Censors—A. T. Coleman, C. G. Moye, J. J. Barton, and
 William A. Dodd

* * *

Montgomery County Medical Society

President—W. M. Moses, Uvalda
 Vice-President—J. E. Hunt, Bynum, Ala.
 Secretary-Treasurer—J. W. Palmer, Ailey
 Delegate—Morris Kusnitz, Jr., Alamo

* * *

Richmond County Medical Society

President—Charles McL. Mulherin, Augusta
 President-Elect—Thomas W. Goodwin, Augusta
 Vice-President—Allen G. Thurmond, Augusta
 Secretary-Treasurer—Gilbert L. Klemann, Augusta
 Delegate—Robert C. McGahee, Augusta
 Delegate—David R. Thomas, Jr., Augusta
 Delegate—John M. Martin, Augusta
 Alternate Delegate—F. N. Harrison, Augusta
 Alternate Delegate—John M. Miller, Augusta
 Alternate Delegate—J. Victor Roule, Augusta

* * *

Spalding County Medical Society

President—Ann Stuckey, Griffin
 Vice-President—T. J. Floyd, Griffin
 Secretary-Treasurer—Virgil B. Williams, Griffin
 Delegate—Kenneth S. Hunt, Griffin
 Alternate Delegate—T. G. Smaha, Griffin
 Censors—George L. Walker, J. T. Giles and Alex P.
 Jones

* * *

Stephens County Medical Society

President—H. H. McNeely, Toccoa
 Vice-President—Charles M. Henry, Toccoa
 Secretary-Treasurer—C. L. Ayers, Toccoa
 Delegate—Robert E. Shiftet, Toccoa
 Alternate Delegate—Arthur E. Singer, Toccoa
 Censors: E. F. Chaffin, H. H. McNeely, and Charles M.
 Henry

* * *

Sumter County Medical Society

President—Henry R. Fenn, Americus
 Vice-President—Wm. B. McMath, Americus
 Secretary-Treasurer—Bon M. Durham, Americus
 Delegate—Henry R. Fenn, Americus
 Alternate Delegate—Wm. B. McMath, Americus
 Censors—Henry R. Fenn, Wm. B. McMath, and Bon
 M. Durham

* * *

Taylor County Medical Society

President—F. H. Sams, Reynolds
 Vice-President—R. C. Montgomery, II, Butler
 Secretary-Treasurer—E. C. Whatley, Reynolds
 Delegate—R. C. Montgomery, Butler
 Censors—Lewis Beason, and R. C. Montgomery

* * *

Thomas County Medical Society

President—Henry S. Pepin, Jr., Thomasville
 Vice-President—Marion A. Baldwin, Thomasville
 Secretary-Treasurer—Kirk Shepard, Thomasville
 Delegate—Rudolph Bell, Thomasville
 Alternate Delegate—John W. Mobley, Thomasville
 Censors—Charles H. Watt, Henry M. Moore, and John
 W. Mobley

* * *

Toombs County Medical Society

President—J. E. Mercer, Vidalia
 Secretary-Treasurer—R. H. DeJarnette, Vidalia
 Delegate—H. D. Youmans, Lyons
 Alternate Delegate—J. D. McArthur, Lyons

* * *

Tri-County Medical Society

Calhoun-Early-Miller Counties

President—W. C. Baxley, Blakely
 Vice-President—James H. Crowdis, Jr., Blakely
 Secretary-Treasurer—H. J. Merritt, Colquitt
 Delegate—J. G. Standifer, Blakely
 Alternate Delegate—C. K. Sharp, Arlington
 Censors—James B. Martin, James W. Merritt, Jr., and
 W. H. Wall

Troup County Medical Society

President—Thomas N. Freeman, Jr., LaGrange
 Vice-President—Evan W. Molyneaux, Hogansville
 Secretary-Treasurer—H. A. Foster, LaGrange
 Delegate—C. Mark Whitehead, LaGrange
 Alternate Delegate—Evan W. Molyneaux, Hogansville
 Censors—Evan W. Molyneaux, Thomas N. Freeman, Jr.,
 and H. A. Foster

* * *

Upson County Medical Society

President—Robert L. Carter, Thomaston
 Vice-President—Douglas L. Head, Jr., Thomaston
 Secretary-Treasurer—Herbert D. Tyler, Thomaston
 Delegate—John E. Garner, Thomaston
 Alternate Delegate—Herbert D. Tyler, Thomaston

* * *

Walker-Catoosa-Dade Medical Society

President—Howard C. Derrick, Jr., LaFayette
 Vice-President—John P. Hoover, Rossville
 Secretary-Treasurer—L. LeBron Alexander, Rossville
 Delegate—Fred H. Simonton, Chickamauga
 Alternate Delegate—Frank L. O'Connor, Rossville
 Censors—Fred H. Simonton, S. B. Kitchens, and Frank
 L. O'Connor

* * *

Washington County Medical Society

President—N. J. Newsom, Sandersville
 Vice-President—Emory G. Newsome, Sandersville
 Secretary-Treasurer—F. T. McElreath, Jr., Tennille
 Delegate—William Rawlings, Sandersville
 Alternate Delegate—Emory G. Newsome, Sandersville
 Censors—O. L. Rogers, B. L. Helton, and R. L. Taylor

* * *

Wilkes County Medical Society

President—T. C. Nash, Philomath
 Vice-President—C. E. Wills, Jr., Washington
 Secretary-Treasurer—A. D. Duggan, Washington
 Delegate—Albert G. LeRoy, Thomson
 Alternate Delegate—M. C. Blair, Washington
 Censors—L. R. Casteel, and A. W. Simpson, Sr.

COMMUNICATION

Dr. Edgar D. Shanks, Editor,
 Journal of Medical Association of Georgia,
 478 Peachtree Street,
 Atlanta, Georgia.

Dear Dr. Shanks:

The following is a memorial to a recent member of our County Society. Would you please publish this in the next issue of the Journal?

The Medical Profession of Muscogee County received with the deepest regret, the news of the tragic death of Doctor and Mrs. S. E. Young of Midland. Dr. Young had practiced medicine in this community for almost 60 years, and was an outstanding example of a type of doctor that is unfortunately becoming rare in the medical profession. To the people of a large area he was a steadfast friend at all times, as well as the family doctor in time of sickness. He was loved by his patients and held in the highest esteem by his fellow practitioners.

The members of the Muscogee County Medical Society deplore his tragic death and extend to his family their deepest sympathy in their great loss.

Thanking you for your kind cooperation, I am,

Sincerely,

JACK C. HUGHSTON, M.D., Secretary,
 Muscogee County Medical Society.

HEALTH PERSONNEL WANTED

To meet the increasing demand for experienced health personnel to staff technical health missions overseas which have been authorized by Congress, the Division of International Health, Public Health Service, is developing an intensive recruiting program.

Opportunities for overseas assignments in the higher grades are expected to develop for a number of physicians, scientists, health educators, sanitary engineers, sanitarians, nurses, administrators, and technicians. Some

of the projects will involve employment by the Public Health Service and some will involve employment by the World Health Organization.

Members of technical health missions can assist foreign governments in establishing public health training, initiate health demonstrations, supervise specific projects, and serve in an advisory capacity to foreign government officials on health matters.

The various overseas health missions of the United States have been authorized by Congress with a view to strengthening mutual understanding between the people of the United States and the people of other countries. Such missions offer a challenge to American health experts to cooperate with the other people of the world in the development of human resources, as well as an opportunity to broaden their own medical and personal horizons.

Recruitment will be limited to highly qualified personnel possessing both expert knowledge in their technical specialties and the ability to inspire cooperation in a constructive program directed toward broad improvements in public health and the general advancement of human relationships.

Assignment will be made in the higher grades. Additional compensation will be provided in the form of allowances for overseas service.

Qualified health personnel may obtain application forms and further details concerning opportunities to participate in these programs by writing to the Chief, Division of International Health, Public Health Service, Federal Security Agency, Washington 25, D. C.

NEWS ITEMS

Dr. Thomas Alsobrook, a native of Rossville, announces the opening of his office for the practice of medicine at 304 Lake Avenue, Rossville. Dr. Alsobrook graduated from Emory University School of Medicine, Atlanta, in 1941, and served his internship at the Missouri Baptist Hospital, St. Louis, Mo. He is a graduate of the School of Aviation Medicine, Randolph Field, Texas, and during World War II served as flight surgeon with the Army Air Forces and held the rank of major. Following the war he served a residency in internal medicine at the Missouri Baptist Hospital, St. Louis.

* * *

Dr. W. L. Ballenger, formerly of Sandy Springs, announces the opening of his office at 1292 Gordon Street, S. W., Atlanta, for the practice of medicine.

* * *

The Atlanta Chapter of A.O.A. Medical Fraternity annual lecture will be held at the Academy of Medicine, Monday, 8:15 P. M., May 8. Dr. Geza de Takats, University of Illinois School of Medicine, Chicago, Ill., will be guest speaker. His subject will be "The Surgical Treatment of Hypertension." Dr. de Takats has done considerable work on vascular disease; has made important contributions to this field, and is well known in the field of vascular surgery. All Atlanta physicians, visiting physicians and medical students are invited to attend the lecture.

* * *

The Bibb County Medical Society held its regular meeting at the S & S Cafeteria, Macon, March 7. Program: "Public Relations and Pending Legislation" by Ed Bridges, Atlanta, Director of Public Relations of the Medical Association of Georgia. Dr. Henry H. Tift, secretary.

The Bibb County Tuberculosis Association, Inc. directors recently named a committee to carry out an educational program in connection with the tuberculosis-fighting unit for this year. Dr. Samuel Patton, Macon physician, president, said that the program will be a "very broad program." Dr. R. Frank Cary, Macon-Bibb health officer, predicted that the association will play an important part in fighting tuberculosis, which he termed the "major" health problem of Bibb county. Drs. Henry H. Tift and Alvin Siegel, Macon physicians, were welcomed as new members of the board.

Columbus and Muscogee County recently set up the nation's first mass testing ground for a new anti-tuberculosis vaccine with a community of 100,000 as guinea pigs. Columbus and Muscogee County pioneered in use of the vaccine in 1947, following an x-ray survey for traces of TB the previous year. Dr. George W. Comstock, Columbus physician and executive director of the survey, said that all those who were x-rayed for possible tuberculosis during the survey were also informed if any heart trouble was found. The drive was to determine how effective the drug—tagged BCG—is when used on a large scale. Dr. Carroll E. Palmer, chief of field duties of the U. S. Public Health Service, said the mass survey would provide a rare opportunity to determine the future role BCG may play in curbing tuberculosis.

* * *

Dr. James B. Craig, Savannah physician, recently spoke at a meeting of the Savannah Branch of the National Vocational Guidance Association on the topic "Causes of Mental Breakdown in School and Industry." Touching on nervous disorders in industry, Dr. Craig explained that many are caused by lack of emotional and financial security, concerning the job situation; workers he pointed out always feel more secure if they have some personal contact with the so-called higher ups.

* * *

The Crawford W. Long Memorial Hospital held its regular monthly staff meeting in the dining room of the hospital, Atlanta, March 14. Program: "An Analysis of Ovarian Pathology for a Three Months Period", case presentation by Dr. R. G. Arrington with discussion by Dr. Darrell Ayer; "Discussion of Ovarian Tumors in Relation to Carcinoma of the Ovary" by Dr. John H. Ridley, Pediatric Section, "Mortality Statistics"—Dr. Edwin Webb, Medical Section, "Diabetic Acidosis—New Concepts" by Dr. Philip Bondy, Surgical Section, "Modern Trends in Anesthesia" by Dr. L. J. Miller, General Practitioners, "Report of the Recent General Practitioners Meeting in St. Louis" by Dr. Harry Ridley.

* * *

Dr. T. C. Davison, Atlanta, was elected president of The American Goiter Association at its recent meeting in Houston, Texas. The 1951 meeting will be held in Columbus, Ohio.

* * *

Dr. Dan Duggan, Washington physician, recently addressed the Lions Club on the subject of "Socialized Medicine, or Compulsory Health Insurance" and the arguments against such a practice. The various International Civic organizations including Lions, are on record as bitterly opposed to such a plan and encourage the general public to join in the fight.

* * *

Dr. Edgar Dunstan, Chairman of the State Medical Civilian Preparedness Committee, will represent the Medical Association of Georgia at the semi-annual meeting of the Council on National Emergency Medical Service of the American Medical Association in Chicago on May 6, 1950. The entire meeting will be concerned with civil defense planning and the relationship of the State, county and local medical societies to the civil defense program. Dr. Dunstan has been asked to participate in a round-table discussion on these problems with Drs. Faus of Hawaii, Steele of Maine, Weston of Wisconsin, Reymont of New Mexico, Fetter of Philadelphia, with Kiefer of the National Securities Resources Board serving as moderator.

* * *

The Eighth District Medical Society held its meeting at the Ware Hotel, Waycross, March 2. The Ware County Medical Society was host at the dinner meeting. Members of the society heard three Georgia cardiologists at a symposium on cardiovascular diseases. Dr. L. Minor Blackford, Atlanta, spoke on "Modern Aspects of Rheumatic Fever and Rheumatic Heart Disease"; Dr. J. W. Chambers, LaGrange, subject was "Treatment of Coronary Thrombosis," and Dr. W. Edward Storey, Columbus,

discussed "The Modern Treatment of Congestive Heart Failure." Dr. Blackford is a director of the Georgia Heart Association, and Dr. Chambers is vice-president of that organization. The symposium in Waycross was the fifth in a series to be held throughout the State under the sponsorship of the Georgia Heart Association and the Georgia Department of Public Health.

* * *

The Emory University School of Medicine, Department of Surgery, Atlanta, was host to the Wisconsin Surgical Club, March 10 and 11, a group of surgeons from Wisconsin who are making a study tour of several outstanding medical centers in the nation. The group included Dr. Frederick A. Stratton, Director of the Department of Surgery, Marquette University School of Medicine, Milwaukee; Dr. Thomas J. Snodgrass, Chief of Surgery, Mercy Hospital, Janesville; Dr. Joseph F. Smith, Chairman of the Surgical Staff, St. Mary's Hospital, Wausau; Dr. Stephen E. Gavin, President Wisconsin Board of Health, and Dr. W. A. Bump, Director of the Cancer Clinics at the University of Wisconsin, Madison.

* * *

Dr. Sidney Farber, Boston, lectured at the Grady Memorial Hospital amphitheater, Atlanta, February 23. He spoke on "Current Research in Cancer With Application to Man." All Atlanta area physicians were invited. The Boston physician is professor of pathology at Harvard Medical School and chairman of the division of laboratories and research at Children's Medical Center, Boston.

* * *

The Fulton County Medical Society held its semi-monthly dinner meeting at the Academy of Medicine, Atlanta, March 16. Scientific meeting opened with Dr. Lamont Henry, moderator, presiding. "The Clinical Aspects of Hematemesis", Dr. Louis M. Howell; "Obstructive Gastro-intestinal Lesions in the Newborn", Dr. J. Dudley King; "Intestinal Obstruction from Medication", Dr. Herbert W. Burton. Members of the Polk County Medical Society were special guests.

* * *

The Georgia Medical Society honored Dr. John L. Elliott, retiring president, and Dr. H. M. Kandel, new president of the society, with a dinner dance at the Hotel Savannah, Savannah, February 28. It was also the occasion of the annual meeting of the society, and marked the second time that wives of members were invited.

* * *

The Georgia Medical Society held its regular meeting at 612 Drayton Street, Savannah, March 14. Dr. J. H. Kite, Atlanta, Chief Surgeon, Scottish Rite Hospital, was guest speaker. His subject was "Errors in the Handling of Orthopedic Patients Before They Reach the Orthopedist, with Illustrations." Dr. Sam Youngblood is secretary.

* * *

The Glynn County Executive Committee of the Georgia Division, American Cancer Society, met at the Oglethorpe Hotel, Brunswick, March 7, and approved 1950 committee chairmanships and discussed plans for this year's drive against the ravages of cancer. Dr. Frank Mitchell, Jr., Brunswick physician, is chairman of the executive committee.

* * *

The Glynn County Medical Society held its regular meeting at the City Hospital, Brunswick, February 21. A symposium on diabetes was discussed. Dr. T. V. Willis, president, sketched the recorded history of the disease. It was recognized by the ancient Greeks and was well described by Roman physicians in the first century, he said. Medical authorities of the 17th century added greatly to the knowledge of "the scourge that still remains, despite advances in modern treatment," he said. The problems of diagnosis were reviewed by Dr. S. P. McDaniel, with references to literature available on the subject. Dr. T. W. Collier described the treatment of diabetes in a digest of the measures now

employed here and abroad. Diabetic management was discussed at length by Dr. I. G. Towson, who illustrated with several case reports. The meeting was concluded with an open discussion of the disease.

* * *

The Glynn County Medical Society held its regular meeting at the City Hospital, Brunswick, March 22, with Dr. T. V. Willis presiding. "Diseases of the Liver and Gallbladder" was the subject presented as follows: "Early Symptoms," Dr. Herbert Kirchman; "Diagnosis," Dr. Frank Mitchell, Jr.; "Treatment and Convalescence," Dr. J. B. Avera. An open discussion followed in which the society's members participated. Dr. T. H. Johnston, secretary.

* * *

Dr. W. Justus Gower, Jr., Atlantan who returned from one year duty with the Army Medical Corps in Japan in December, announces his association with Dr. R. E. Dallas of Thomaston. Drs. Dallas and Gower have formed a partnership for the Dallas-Gower Clinic in Thomaston. Dr. Gower graduated from the University of Georgia School of Medicine, Augusta, in 1946 and interned at Jersey Medical Center, Jersey City, N. J. He served as resident physician at Crawford W. Long Memorial Hospital, Atlanta. Dr. Gower also served a year at the Memphis General Depot, Memphis, after entering the U. S. Medical Corps and before going to Japan. In Japan he was commanding officer of the Station Hospital with the 7th Infantry Division serving with the rank of captain.

* * *

Dr. W. F. Hamilton, Augusta, a member of the University of Georgia School of Medicine faculty, has returned to Augusta from Cleveland, Ohio, where he attended a meeting of the scientific council of the high blood pressure division of the National Heart Institute. The council, Dr. Hamilton said, discussed raising of funds and allocations of funds for work in the field of cardiac research.

* * *

Dr. Raymond L. Harris, a native of Wrightsville, Ga., has been appointed manager of the Franklin Delano Roosevelt Hospital, Peekskill, N. Y. It is said to be the finest hospital among all the Veterans Administration institutions. Nothing has been spared in making it complete in every way. It cost \$22,000,000 and has 2,000 beds. Dr. Harris graduated from the University of Georgia School of Medicine, Augusta, in 1921 and retains his membership in the Laurens County Medical Society and the Medical Association of Georgia.

* * *

Dr. Alvin D. Josephs, Atlanta, announces the removal of his office to Suite 202 West Peachtree Doctors Building, 663 West Peachtree Street, N. E., Atlanta. Practice limited to internal medicine and diagnosis.

* * *

Dr. J. H. Kite, Atlanta, was elected vice-president of the American Academy of Orthopedic Surgery at the meeting held recently in New York City. Drs. William Bondurant, Thomas P. Goodwyn, H. Walker Jernigan, Paul L. Rieth and Ernest B. Dunlap, Jr. attended the above named meeting. Drs. Bondurant and Dunlap took examinations for the American Board of Orthopedics.

* * *

Pursuant to recommendations made by Dr. George D. Strayer of Columbia University and his associates who made a special survey of the University System of Georgia, the Board of Regents of the University System on January 18, 1950, (1) declared the medical school a separate and independent unit within the System, (2) restored the name to Medical College of Georgia, and (3) changed the title of the head of the school from Dean to President.

* * *

The Medical College of Georgia, Augusta, is one of the 48 institutions in the United States which will participate in an \$863,496 research grant announced by the National Cancer Institute on March 12. The Medical College of Georgia was awarded \$5,940 for continuation

of a project started under an earlier Institute grant, the announcement said.

* * *

The Medical College of Georgia received another large grant for research from the National Heart Institute. The Heart institute has allocated \$105,000 to the Medical College for expanding its research program on the circulatory system. This is the second allocation received by the college, the first having been allocated for the enlargement of the laboratory in Dr. W. F. Hamilton's department. Dr. Hamilton is in charge of the research work on the circulatory system.

* * *

Dr. J. C. Metts, Savannah, lectured at the Veterans Administration Hospital, Dublin, March 23. His subject was "Abdominal Pain in Chronic Disease." His was one of a series of lectures by visiting clinical teachers which the hospital constantly provides for its staff. The members of the Laurens County Medical Society were guests of the hospital at the dinner and scientific meeting. Dr. F. M. Nunez, president, Laurens County Medical Society, and Dr. O. H. Cheek, secretary-treasurer.

* * *

Dr. D. S. Middleton, beloved physician of Rising Fawn and Dade County, was honor guest of the Dade County Lions Club at the annual Ladies' Night meeting held at the Dade High School, February 14. Dr. Middleton has been practicing medicine for over 55 years and says during this time he has delivered more than 5,000 babies which would almost make up the entire population of Dade County. Inscribed on the bronze plaque presented to Dr. Middleton was: "A testimonial of sincere appreciation presented to D. S. Middleton, M.D., in honor and with deep appreciation of the distinguished and unselfish service given the people of Dade County during the past 55 years as a Doctor of Medicine. Presented by The Lions Club of Dade County, 1950". Dr. Middleton in his speech of thanks said that usually nice things were said about you after you were dead and it was a wonderful experience to receive this token of thanks while he could still appreciate it.

* * *

Dr. Frank K. Neill, Albany physician, recently told members of the Albany Registered Nurses Club that under a socialistic state, medical schools would suffer for lack of donations and foundations established by the wealthy. He stated that the medical profession is taking steps to eliminate some of the faults which laymen find in medical practice today.

* * *

The Oliver General Hospital medical officers held their monthly meeting at the hospital, Augusta, February 23. Dr. Leonard W. Edwards, Nashville, Tenn., professor of clinical surgery, and chief of surgical service, St. Thomas Hospital, was guest speaker. Dr. Edwards' subject was "Present Day Trend in the Surgical Treatment of Duodenal Ulcer."

* * *

Dr. Wendell L. Hughes, New York City physician, addressed the personnel of the E.E.N.T. clinic at the Oliver General Hospital, March 2. In conjunction with his address, Dr. Hughes showed the following motion pictures: "Cartilage Implant for Depressed Fracture of Orbital Margin and the Maxilla"; "Exenteration of the Orbit: Removal of Dermoid Extending Along the Floor of the Orbit to its Apex"; "Lymphoma of Conjunctiva: Pulsating Exophthalmos in Neurofibromatosis", and "Modifications of Wheeler Operation for Spastic Entropion."

* * *

Dr. Morgan Raiford, Atlanta, recently addressed the Lions Club of Sparta in connection with the examination of eyes of all Hancock County school children, white and colored. Special machines were furnished for the eye tests and much treatment was necessary in some cases. Sponsored by the Georgia Lighthouse for the Blind and the Sparta Lions Club, the campaign was continued for several weeks. The cases needing immediate attention were attended to at the Grady Clay Memorial Eye Clinic,

Atlanta. Dr. Raiford told the Sparta Lions that he would help all he could in fitting the children for better eyesight, either by glasses or operation.

* * *

Dr. Samuel R. Poliakoff, Atlanta, announces the opening of his office at 26 Linden Avenue, N. E., Atlanta, for the practice of obstetrics and gynecology.

* * *

Dr. C. L. Roles, Camilla, who has been engaged in the general practice of medicine for a number of years, recently moved his office from a downtown building to his residence on South Scott Street, Camilla.

* * *

The Southeastern Surgical Congress held its eighteenth assembly in Washington, D. C., March 6-9, 1950. Georgia physicians registered were Drs. W. R. Baker, Hawkinsville, B. T. Beasley, Atlanta, Enoch Callaway, LaGrange, Olin S. Cofer, Atlanta, H. S. Colquitt, Smyrna, W. W. Daniel, Atlanta, Ralph Davis, Rome, J. H. Dew, Atlanta, Frank Eskridge, Atlanta, W. M. Feild, Albany, D. B. Fillingim, Savannah, T. J. Floyd, Jr., Griffin, G. W. Fuller, Atlanta, Regina Gabler, Atlanta, J. P. Garner, Atlanta, O. D. Gilliam, Atlanta, Kenneth D. Grace, LaGrange, Irving L. Greenberg, Atlanta, M. M. Hagood, Marietta, W. D. Hall, Calhoun, S. P. Holland, Blakely, M. A. Hubert, Athens, Kenneth S. Hunt, Griffin, E. R. Jennings, Milledgeville, W. P. Jordan, Jr., Columbus, Harold F. McDonald, Atlanta, J. D. Martin, Jr., Atlanta, R. C. Montgomery, Butler, Perrin Nicolson, Atlanta, W. A. Norton, Savannah, J. C. Patterson, Cuthbert, C. S. Pittman, Jr., Tifton, J. E. Steadman, Hapeville, John P. Tucker, Bainbridge, and W. J. Williams, Augusta. Dr. B. T. Beasley, secretary-treasurer.

* * *

Dr. John K. Stalvey, Savannah, chairman of the medical and scientific committee of the Chatham-Savannah Tuberculosis and Health Association, announced that Dr. Clair A. Henderson, health commissioner of the Savannah-Chatham County Health Department, recently spoke to the nurses of Warren A. Candler and St. Joseph's hospitals on "The Health Department and the Community in the Control of Tuberculosis."

* * *

Drs. Philip R. Stewart and Harry B. Nunnally, Monroe, announce the opening of the Stewart-Nunnally Clinic on East Highland Avenue, Monroe. The clinic is equipped to do complete physical examinations, x-ray, physiotherapy, and cardiography.

* * *

Drs. V. P. Sydenstricker, John H. Sherman and Edgar R. Pund, Augusta physicians, have been commended by Major General R. W. Bliss, Surgeon General, for their outstanding contributions to the success of the Graduate Professional training program. Colonel H. S. Villars, commanding officer of Oliver General Hospital presented Drs. Sydenstricker, Sherman and Pund letters of commendation from the Surgeon General. The letters expressed General Bliss' "sincere and heartfelt gratitude for their efforts; since without their full and continued support, the program would not have been implemented". Also receiving a letter was Dr. G. Lombard Kelley, dean of the Medical College of Georgia, who although not a consultant "was extremely helpful in the establishment and conduct of the training program at Oliver General Hospital."

* * *

Dr. F. William Sunderman, formerly of Houston, Texas, investigator in experimental medicine, recently joined the staff of the Communicable Disease Center of the U. S. Public Health Center, Atlanta. Dr. R. A. Vonderlehr, Atlanta, medical director of the center, announced. Until recently Dr. Sunderman was a professor at the University of Texas, and a director of clinical cancer research of M. D. Anderson Hospital, Houston. He is president-elect of the American Society of Clinical Pathologists, and author of a medical textbook. He is known for his work in explosive research and was acting medical director at an Atomic Energy Commission research center.

Dr. Corbett Thigpen, Augusta, of the Speakers' Bureau of the Georgia Medical College was guest speaker at the regular meeting of the Altamaha Medical Society (Appling County) held at the Mimosa Club, Baxley, February 15. Dr. Thigpen's subject was "Depression Diagnosis, and Electric Shock, Electric Narcosis Treatment." Dr. Harold W. Muecke, pediatrician of Waycross, was also a guest of the society. The group approved payment of \$1.00 per member to the Eighth District Medical Society and \$25.00 each to the American Medical Association to fight socialized medicine.

* * *

Dr. R. A. Vonderlehr, Atlanta, medical director in charge of the Communicable Disease Center, U. S. Public Health Service, was elected first president of the Atlanta Branch of the Scientific Research Society of America, the first established in the South. Installation ceremonies were held at Mammy's Shanty, Atlanta, March 1. Dr. Donald B. Prentice, director of the society, and Dr. George A. Battsell, treasurer, were guest speakers. Other officers are Dr. J. M. Andrews, vice-president; Dr. M. M. Brooke, secretary-treasurer, and Dr. G. H. Bradley and Dr. W. M. Fisher, executive committee members. There are 93 charter members.

* * *

The Waycross Eye Clinic, Inc., Waycross, has finished the first year of work and has mailed to the doctors of Georgia the first annual report and analysis of cases. Dr. B. H. Minchew, Waycross, director, surgical service; Dr. B. E. Collins, secretary and treasurer, and Drs. Leo Smith, W. D. Mixson are directors. The clinic, a non-profit organization, was incorporated in September 1948. It was made possible by a generous friend of the medical profession who is in great sympathy with the indigent blind. Through his generosity and benevolence the work has been accomplished. One hundred-fifty-six patients have received ophthalmic surgery without cost.

* * *

Dr. Fred H. Simonton, Chickamauga physician, recently attended the 1950 Scientific Assembly of the American Academy of General Practice held in St. Louis, Mo. Dr. P. L. Williams, Cordele physician, and his son, Dr. P. L. Williams, Jr., Macon, also attended. More than 5000 family doctors from every part of the country attended. The scientific program included lectures by outstanding physicians of Boston, New York City and Ann Arbor, Mich.

* * *

Dr. Peter B. Wright, Augusta, well known physician and professor of orthopedic surgery at the Georgia Medical College, was signally honored by the American College of Orthopedic Surgery in session in New York City. Dr. Wright was presented a gold medal for the most outstanding exhibit at the annual session. His scientific exhibit, which won first place, was entitled "Paget's Disease."

* * *

Dr. Caroline Jane Williams, Savannah physician, recently discussed "A Successful Tuberculosis Program" in a lecture to the student nurses of Warren A. Candler and St. Joseph's Hospitals. The lecture revealed the importance of occupational therapy; in hospital training for the patients; the establishment of a rehabilitation program, and the services of medical social workers, as well as the treatment of the physical condition of the patient. Dr. Williams is the wife of Dr. Fenwick T. Nichols.

* * *

Dr. Neal F. Yeomans, Augusta, of the University Hospital and Georgia Medical College, is studying the technics of using radioisotopes in research at Oak Ridge Institute of Nuclear Studies, Oak Ridge, Tenn. Dr. Yeomans, a resident in the x-ray department, University Hospital, Augusta, plans to use radioisotopes in diagnostic and therapeutic applications in medicine with special reference to cancer.

Dr. James E. Paullin, Atlanta physician, will present a paper at the Thirty-first Annual Session of the American College of Physicians to be held in the Grand Hall, Mechanics' Building, Boston, Mass. Dr. Paullin will read his paper Thursday afternoon, April 20, entitled "Lessons from Forty Years of Experience in Medical Teaching". Dr. Carter Smith, Atlanta, is a member of the Board of Governors of the American College of Physicians. He will attend the Boston meeting.

OBITUARY

Dr. Wilbur Clair Hafford, aged 63, Waycross physician, died February 26, 1950 at a Waycross hospital after a short illness. Dr. Hafford graduated from the University of Louisville School of Medicine, Louisville, Ky., in 1911, and had practiced medicine in Waycross and Ware County for 33 years. He was a tireless civic worker and during his 33 years in Waycross had been engaged in practically every civic movement of importance. He was president of the Okefenokee Swamp Park Association and loved the swamp, spending much time there working on many and various committees for its promotion. The main trail of Okefenokee Swamp Park and into the swamp has been named "Hafford Trail" in his honor. But it was in his profession where he served most, as former president of the Ware County Medical Society and also as an officer of the Eighth District Medical Society. He was a member of the Medical Association of Georgia and a fellow of the American Medical Association. Dr. Hafford served as a steward of the First Methodist Church of which he was a member. He was acting Health Commissioner of Ware County, and was particularly interested in improving public health in Ware and Clinch counties. Survivors include his wife; a son, Wilbur A. Hafford, Atlanta; one daughter, Mrs. Lois Elizabeth Grossmann, Waycross; two sisters, and two grandsons. Funeral services were held at the First Methodist Church with the pastor, the Rev. Woodward Adams officiating, assisted by the Rev. J. C. G. Brooks. The Ware County Medical Society members and stewards of the First Methodist Church served as an honorary escort. Burial was in Oakland Cemetery, Waycross.

* * *

Dr. William Roy Richards, aged 59, physician and former Mayor of Calhoun, died at Lawton VA Hospital, Chamblee, after a long illness March 23, 1950. He was a native of Jasper, moving with his parents to Calhoun when he was 12 years old. He was a graduate of the Atlanta School of Medicine, now Emory University School of Medicine, Atlanta, in 1913. Dr. Richards was a member of a family that had furnished three physicians for Calhoun and Gordon County; his father, the late Dr. W. A. Richards; himself and his son, Dr. Charles Richards. He served in World War I, was a member of the American Legion, the ATO Fraternity, the Methodist Church, the Rotary Club and a Shriner. He was a member of the Gordon County Medical Society, the Medical Association of Georgia, and a fellow of the American Medical Association. He is survived by his wife, the former Miss Helen Martin, Culloden; two sons, Roy Martin Richards, Atlanta, and Dr. Charles Richards, Calhoun; three grandchildren; one sister, Mrs. C. B. Dyar, Sr., Atlanta, and one brother, Luther Richards, Baton Rouge, La. Funeral services were held at the Methodist Church with the Rev. C. W. Fruit, pastor, and the Rev. W. H. Gardner, Monroe, former pastor, officiating. Burial was in Fain Cemetery, Calhoun.

HEALTHGRAMS

It is increasingly clear that screening the general population for tuberculosis must be combined and coordinated with other screening programs for other important pathological conditions—such as cardio-vascular disease, cancer, syphilis, and diabetes—similarly characterized by relatively long subclinical periods in which detection may be life conserving or important to community protection. James E. Perkins, M.D., Bull. Nat. Tuberc. A., Jan., 1950.

It is almost axiomatic that tuberculosis cannot be controlled as well as we know how to do it when there is a weak health department, a short-sighted appropriation authority, lack of hospital beds, poor community chest or lack of coordinated program for all community health services. William P. Shepard, M.D., Nat. Tuberc. A. Bull., Oct., 1949.

Little can be accomplished in preventive medical service without the intelligent cooperation of the family. The physician rendering such service is therefore primarily a health educator. Although health education in the mass has been adopted by schools, health departments and industries, individual and family instruction is the most effective approach. Every health examination from the prenatal period to old age should be a session in health education, with simple explanation of the reasons for various tests, favorable comment on normal findings and instruction on how deviations from the normal can be overcome or held in check. Such procedures are paramount in winning the confidence of the individual and family in the skill and personal interest of the physician. Henry E. Meloney, M.D., The Milbank Mem. Fund Quart., July, 1949.

The early diagnosis of tuberculosis remains one of the major problems of general practice. The standard of what constitutes early diagnosis has considerably altered. In the days before the general use of chest radiography one had to depend upon the finding of abnormal physical signs in the chest or on the presence of the bacilli in the sputum—a stage nowadays considered too late. In theory, of course, early diagnosis is quite easy. The chest is X-rayed and the problem is solved. But in actual practice things can work out very differently. The early signs are so slight, so varied, so indeterminate, that unless a doctor is tubercle-conscious an X-ray may not be called for and precious time is wasted. R. J. Perring, M.D., Lancet, (London) Dec., 1949.

Tuberculosis control does not begin at the door of the sanatorium nor does it end there. After the patient has been returned to his community, many agencies—the tuberculosis association, the health department, the local welfare agency—all work together with him to get him back on his feet and to keep him there. R. D. Thompson, M.D., Bull., Nat. Tuberc. A., Oct., 1949.

As a result of intensive studies during the past few years, evidence has accumulated which suggests that histoplasmosis—formerly believed to be a rare and usually fatal disease—also exists as a mild asymptomatic syndrome which is very prevalent in certain parts of the world. Although quite typical cases of clinical histoplasmosis are probably much more frequent than previously thought, the principal significance of the asymptomatic form is that in certain respects the disease so closely resembles tuberculosis as to be frequently confused with it. Michael L. Furcolow, M.D., Pub. Health Rep., Nov., 1949.

WHY A PHYSICAL EXAMINATION?

A periodic physical examination is the best insurance anyone can have to maintain a good health status. Many persons will pay more attention to their automobiles, forgetting entirely that the good functioning of their body machinery is equally important to health and safety, the Educational Committee of the Illinois State Medical Society observes in a *Health Talk*.

A complete physical examination serves two ends: the early detection of disease and the prevention of disease. The latter objective is the chief aim of medicine, but if disease is present, its early detection will lend itself to control more easily.

In a complete physical examination, the history of the patient is very important. In other words the health background of the patient and his family may yield

information of great importance to the physician in making a diagnosis.

And that is why trust and confidence in your physician is essential. Holding back information, being secretive and otherwise uncooperative are unwise. A person in describing his complaints to a physician should tell the whole story. Aches and pains stem from a cause. If an examination by the physician proves that organically the body is sound, hidden fears, resentments, and worry may be placing such an emotional strain on the individual that physical discomforts will be noticed.

So in giving your health background to your physician, be truthful. Give him opportunity to understand your emotional problems too.

The next step in the physical examination is the check-up on the body. This includes an investigation of the heart, the lungs, reflexes, an examination of the eyes, ears, glands; a probing or palpation of the pelvic organs, and a study of the blood pressure.

The physical examination also includes examination of the blood and of the urine, both of which reveal conditions that may be present, even though symptoms may not be too marked. Blood tests show various abnormalities, such as anemia or leukemia, the presence of infection in the body, and syphilis. A urinalysis will reveal diabetes or some kidney disease.

The physical examination should include a chest x-ray. Very often, the physician will examine the patient through the fluoroscope, which enables him to see certain organs of the body in action.

Many people would like to have a physical examination, but postpone it because they do not have a physician, or do not understand how to find one. Every state has a medical society which in turn is made up of county medical societies. To obtain a physician, check with your county medical society. Some county medical societies are not large enough to maintain their own headquarters or a full time staff. To learn the name of the secretary of your county medical society, direct your inquiry to the state medical society.

Always in the complete physical examination, your physician will look at your teeth and ask when you had your last dental check-up. Good dental care is important in the entire picture of the health of the body.

Why a physical examination? Because the findings will help keep you in good condition and permit the correction of any abnormalities should they exist.

NEW BOOKS

UROLOGICAL SURGERY. By Austin Ingram Dodson, M.D., F.A.C.S., Richmond, Virginia. Professor of Urology, Medical College of Virginia; Urologist to the Hospital Division, Medical College of Virginia; Urologist to Crippled Children's Hospital; Urologist to St. Elizabeth's Hospital; Urologist to St. Luke's Hospital and McGuire Clinic. With contributions by twelve leading urologists. Second edition. Cloth. Price \$13.50. Pp. 855, with 645 illustrations. The C. V. Mosby Company, St. Louis, 1950.

This book is concisely written, easily read, well illustrated and well documented with reference. Written by a man outstanding in his field it is of more than passing interest to the urologic surgeon. It is an outstanding contribution to modern urology. A timely volume, whose deep importance to the urologist and the student planning to practice urology cannot be stressed too much.

COAGULATION, THROMBOSIS, AND DICUMAROL: With an Appendix on Related Laboratory Procedures. By Shepard Shapiro, M.D., Assistant Professor of Clinical Medicine, New York University College of Medicine; Visiting Physician, Third (New York University) Medical Division, Goldwater Memorial Hospital; Associate Physician, Lincoln Hospital; and Murray Weiner, B.S., M.S., M.D., Fellow in Medicine, New York University College of Medicine; Research Assistant, Third (New York University) Medical Division,

Goldwater Memorial Hospital; Assistant Visiting Physician, Willard Parker Hospital Chest Service; Clinical Assistant Visiting Physician, Bellevue Hospital. Cloth. Price, \$5.50. Pp. 131, with illustrations. Brooklyn Medical Press, Inc., P. O. Box 99, Cathedral Station, New York 25, N. Y., 1949.

Says this book: "The practitioner using dicumarol should be familiar with the effects of vitamin K. He should be on guard against the simultaneous use of dicumarol and salicylates. It may also be wise to be alert to the possible effects of the xanthenes on coagulability. Other than these, no commonly used drug is known to significantly influence the effect of dicumarol therapy."

THE CYTOLOGIC DIAGNOSIS OF CANCER: By the Staff of the Vincent Memorial Laboratory of the Vincent Memorial Hospital. A Gynecologic Service Affiliated with the Massachusetts General Hospital, Boston, Massachusetts. The Department of Gynecology Harvard Medical School. Published under the Sponsorship of the American Cancer Society. 229 pages with 153 figures. Philadelphia & London: W. B. Saunders Company, 1950. Price \$6.50.

This book written by the staff of Vincent Memorial hospital and dedicated to Dr. George N. Papanicolaou, the father of modern cytologic diagnosis of cancer by the smear method, is one of the best illustrated volumes printed on the subject; therefore the book will command a place not only in doctors' clinics, but should prove of great value to teachers and students of medicine. It is brief and well written and printed in a progressive manner from normal to pathologic types of cells. We unhesitatingly recommend it to any one interested in cytologic diagnosis.

JACK C. NORRIS, M.D.

POSTGRADUATE GASTROENTEROLOGY — As Presented in a Course Given Under the Sponsorship of the American College of Physicians in Philadelphia December MCMXLVIII: Edited by Henry L. Bockus, M.D., Professor of Gastroenterology, University of Pennsylvania Graduate School of Medicine. 670 pages with 258 figures. Philadelphia and London: W. B. Saunders Company, 1950. Price \$10.00.

The contents of this book represent current thinking regarding the many problems dealing with gastroenterology. Every practitioner of medicine and surgery will find the book useful.

CURRENT THERAPY 1950—Latest Approved Methods of Treatment for the Practicing Physician—Editor: Howard F. Conn, M.D. Consulting Editors: M. Edward Davis, Vincent J. Derbes, Garfield G. Duncan, Hugh J. Jewett, William J. Kerr, Perrin H. Long, H. Houston Merritt, Paul A. O'Leary, Walter L. Palmer, Hobart A. Reimann, Cyrus C. Sturgis, Robert H. Williams. 736 pages. Philadelphia and London: W. B. Saunders Company, 1950. Price \$10.00.

Current Therapy 1950 is what its name implies. All contributors to this volume are reputable and the book has been carefully edited. All practitioners of medicine should have a copy, since therapy is a necessary part of their work.

THE 1949 YEAR BOOK OF DRUG THERAPY. (November, 1948-October, 1949). Edited by Harry Beckman, M.D., Director, Department of Pharmacology, Marquette University School of Medicine. Cloth. Price \$4.75. Pp. 718, with illustrations. The Year Book Publishers, Inc., 200 E. Illinois St., Chicago 11, 1950.

Year Books always are a source of current thinking, and this one is full of meat for the year 1949.

MEDICAL MANAGEMENT OF GASTROINTESTINAL DISORDERS. By Garnett Cheney, M.D., Clinical Professor of Medicine, Stanford University Medical (Continued on Page XVI)



Extensive mucosal destruction and ulceration from chronic ulcerative colitis with only a few inflammatory polyps.



SEARLE

IN COLITIS MANAGEMENT—In the constipation of spastic, atonic and even ulcerative colitis,¹ the smoothage action of METAMUCIL is of proved value.

METAMUCIL[®] provides a bland, soft bulk with a tendency to incorporate irritating particles with the fecal residue and is thus a valuable adjunct in correcting the constipation and minimizing irritation of the inflamed mucosa. METAMUCIL is the highly refined mucilloid of a seed of the psyllium group, *Plantago ovata* (50%), combined with dextrose (50%).

(Continued from Page 184)

School. Cloth. Price \$6.75. Pp. 478, with illustrations. Year Book Publishers, Inc., 200 E. Illinois St., Chicago 11, 1950.

The medical management of gastrointestinal disorders can tax the patience of any physician. This moderate size book by Dr. Cheney will be found most useful in solving many of these problems.

SEXUAL DEVIATIONS: A Psychodynamic Approach. By Louis S. London, M. D., Diplomate, American Board of Psychiatry and Neurology, Member American Psychiatric Association, Fellow of the American Medical Association and other medical societies; and Frank S. Caprio, M.D., Member, American Psychiatric Association, Society for the Advancement of Psychotherapy, American Medical Association and other medical societies. With a foreword by Nolan D. C. Lewis, M.D., Professor of Psychiatry, College of Physicians and Surgeons, Columbia University, Director New York State Psychiatric Institute and Hospital, Editor The Psychoanalytic Review. Cloth. Price \$10. Pp. 702. Published by The Linacre Press, Inc., Washington 6, D. C., 1950.

However much laymen and physicians wish to avoid some of the problems of sex, they arise anew and must be met at some time. This book is an excellent effort in the right direction.

A MANUAL OF CARDIOLOGY: By Thomas J. Dry, M.A., M.B., Ch.B., M.S. in Medicine, Associate Professor of Medicine, University of Minnesota (Mayo Foundation); Consultant in Section on Cardiology, Mayo Clinic. New, Second Edition. 355 pages with 97 figures. Philadelphia and London: W. B. Saunders Company, 1950. Price \$5.00.

Another good book on cardiology, and not too bulky. It is well worth the money.

MEDICAL GYNECOLOGY: By James C. Janney, M.D., F.A.C.S., Associate Professor of Gynecology, Boston University School of Medicine; Associate Visiting Gynecologist, Massachusetts Memorial Hospital. New, 2nd Edition. 454 pages with 103 figures. Philadelphia and London: W. B. Saunders Company, 1950. Price \$6.50.

This book is most excellent in every detail. Every practitioner of medicine should have a copy.

A CENTURY OF MEDICINE IN JACKSONVILLE AND DUVAL COUNTY. By Webster Merritt, M.D. Price, \$3.50. Pp. 220. Illustrations 44. Gainesville, Fla.: University of Florida Press, 1949.

Physicians and laity alike will find in this engaging narrative a most important contribution to Florida's medical and historical lore. With the sure and forthright touch of the true historian, Dr. Merritt presents in panoramic review the fascinating events, towering personalities and progressive movements of the entire nineteenth century as they pertain to medicine in Jacksonville and Duval County. His exhaustive research and painstaking efforts have brought to light in highly readable form history long obscured, owing to loss of official records in the Jacksonville fire of 1901. In sifting out the facts for this entertaining and accurate account, he pictures the physician as community builder and harbinger of progress as well as practitioner of medicine, and his facile pen loses none of the drama of the terrifying yellow fever and other epidemics or the gala events of the times. With equal skill he traces the foundation and early history of the Florida Medical Association and of the Florida State Board of Health.

As related editorially in this issue of The Journal, the author is a brilliant scholar and able historian who has made notable contributions to Florida history in The Journal and in historical publications. His book is profusely illustrated throughout its twenty chapters and makes a valuable addition to any library, particularly that of the physician.—*Journal of the Florida Medical Association, August 1949.*

INTERNSHIP OR GENERAL RESIDENCY available immediately at City Hospital, Brunswick, Ga. 100 bed capacity with provisional ACS approval. Full maintenance plus \$200.00 per month salary. Write Dr. M. E. Winchester, The City Hospital, Brunswick, Ga.

LONG established hospital for immediate sale in South Georgia—Surgeon in charge retiring. Well equipped and fully accredited by College of Surgeons. Nurses home and doctors' apartments joining hospital. Contact Journal Medical Association of Georgia, 478 Peachtree St., N. E., Atlanta, Ga.

WANTED—Graduate of class A medical school—preferably a young man with family. A large practice consisting of general medicine and surgery. Have 16-bed hospital, 16 miles from Atlanta. Salary open. Partnership at later date if both satisfied. J. G. Bussey, M.D., Austell, Ga.

FOR SALE—Complete office equipment for general practice. Also General Electric X-ray unit from the estate of Dr. Raymond Harris. Will sacrifice. Mrs. Raymond Harris, P. O. Box 154, Phone 157, Ocilla, Ga.

FOR SALE: Millen Georgia Hospital. Fully accredited by American College of Surgeons since 1930. Modern 26-bed hospital, completely equipped. Large attractive apartment for Resident Doctor, Nurses' quarters. Beautiful and ample grounds to allow for expansion. Hospital owned and has been operated, until last few weeks, by one of the leading surgeons in the South. Ill health reason for selling. For particulars write—

JOHN W. DICKEY COMPANY, Realtors
128 8th St., Augusta, Ga.

ESTES SURGICAL SUPPLY COMPANY

Phone WALnut 1700-1701

56 Auburn Avenue

ATLANTA, GA.

THE JOURNAL

OF THE

MEDICAL ASSOCIATION OF GEORGIA

PUBLISHED MONTHLY under direction of the Council

Vol. XXXIX

Atlanta, Georgia, May, 1950

No. 5

MEDICINE AND FREEDOM

ERNEST E. IRONS, M.D.

Chicago

Physicians traditionally dislike publicity. The medical profession is well known for its reticence with the press, and at times has been roundly criticized for it. This avoidance of publicity is unfortunate, because through the American Medical Association and its journals and bureaus, physicians have openly opposed low standards and bad medical practice. They have fought for medical advances, for healthier citizens, for a healthy nation. But they have failed to tell of their many achievements in the public interest. Thus they have allowed promoters of socialist ideas to create a widespread opinion that physicians are opposed, for selfish reasons, to the improvement of medical care of the people. Such propaganda is absurd, and its political sponsors well know the untruthfulness of their charges, but until the people are made fully aware of the true facts, they are in danger of becoming the innocent and intended victims of this untruth.

This attack on the quality and freedom of American medicine is an important part of a far more dangerous program which will destroy free enterprise and shackle the freedom, typical of our American democracy. The destruction will be complete if the socialist welfare state is established. This present attack poses a national emerg-

ency far more serious than those following the repeated politically manufactured crises to which we have been subjected in recent years. It is so serious that medicine must add its forces to those of other professional, business and social groups, independently of political parties, if we are to prevent our country from being dragged to the level of the nations already victimized by socialistic programs.

Service of American Medicine to the Public

Since its organization in 1847, the American Medical Association has continually promoted measures for improvement of medical care of the American people. Soon after its organization the Association began its long service to the public, in the extension of preventive medicine, by urging a nation-wide use of the well proved vaccination against smallpox. Measures for raising standards of medical education, and for the exposure of medical frauds and quackery followed. The Council on Pharmacy and Chemistry was organized to establish standards for new drugs and honest advertising. Even then the American Medical Association was attacked as a selfish group, because these activities interfered with the schemes of reckless promoters. The Federal food and drug laws followed the crusading efforts of this Council of the American Medical Association; they were passed only after years of effort to overcome governmental delay and resistance of vested selfish interests. Through other councils and bureaus the American Medical Association has promoted sound extension of

President of the American Medical Association.
Guest speaker before the Medical Association of Georgia
in annual session, Macon, April 19, 1950.

rural medical service; it is stimulating and participating in industrial health and rehabilitation programs; it has actively supported the establishment of county health units; it has formulated standards for hospital service, and for medicinal foods and appliances, all for the protection of the public. The Association cooperated with medical sections of the armed services and provided much help in securing the participation of 60,000 physicians in World War II. It is now assisting these services in planning adequate defense for the future. Its help has been utilized by the Department of the Interior for the improvement of medical care of the Indians and of other citizens in Puerto Rico, the Virgin Islands and Alaska.

The Association is actively promoting an educational campaign for voluntary health insurance, but only after an experimental period of trial in the 1930's, to assure the actuarial soundness of plans offered to the public. Hospital insurance plans are now used by more than 65 million of our people, and this phenomenal growth is continuing. Insurance to provide for medical bills is growing at a still faster rate. These and many more similar objectives of the Association in the public interest are being realized by an orderly evolution and by careful application of the progressive increase in medical science and medical knowledge. Physicians thus are truly in favor and in active support of all sound measures for the betterment of the health and welfare of our people, but they prefer to gain these objectives by evolution rather than by revolution.

But when the physicians of this country, represented by the American Medical Association, refused to bow down to the demands of the advocates of a politically inspired program of nationalized medicine and the medical invasion of States' rights

as a step in the transformation of our government into a socialist welfare state, we were charged with being in opposition to progress and to the best interests of the health of our citizens.

We as physicians are opposed to quackery, political as well as medical. We are opposed to trifling with human life by the use of dangerous quack remedies and to deceptive proposals of medical charlatans. We are likewise opposed to trifling with human welfare by the promulgation of any so-called welfare measure which saps the vitality and incentive of citizens and ultimately leaves them enmeshed in the toils of socialism.

We as physicians and citizens are opposed to the imposition on the American people of a system of compulsory taxation to pay for a medical program which will destroy the quality of present medical care, and make impossible the remedying of recognized faults in our present system. We are opposed to the saddling on our national budget of an additional burden which will add to the present waste of our national financial resources, increase our taxes, and accelerate the progress of inflation.

Finally, and most important of all, we are opposed to the undermining of our American democracy by the insidious propaganda of false security of the socialist welfare state. We are in accord with Benjamin Franklin who said, "Those who would give up essential liberty to purchase a little temporary safety, deserve neither liberty nor safety."

Diagnosing the Welfare State

Nations throughout all history have experienced periods of economic and social distress and have tried remedies whose technics were the same as those employed in more modern times. Attempts to develop a managed economy antedated the theories of Karl Marx by many centuries.

I shall cite the experiences with the welfare state in three nations in which you will note a startling similarity of symptoms.

Economic and social distress in nations, arises through the inability of the masses of the people to adjust to new economic and social conditions. Among the causes of this distress in national groups have been the destruction by war of savings and capital represented by property; failure of food supply with increasing population; growth of urban populations induced by industrialization; and revolution itself precipitated by incompetence, excessive taxation and compulsion on the part of governments.

The fall of the Roman Republic, hastened by the economic distress of the masses of the Roman populace, resulted from a combination of causes including rivalry and dishonesty of public officials, and by failing food supply of the greatly expanded population of Rome. Roman businessmen, avariciously unmindful of the poor, suffered financial losses by reason of the Asiatic wars; farmers, dispossessed of their land and homes by military confiscation and destruction, gravitated to the city. In these critical years the currency was devalued; finally all debts were scaled down 75 per cent. To placate the people, the government bought wheat and sold it at a low price. Later wheat was given free to the citizens. Relief measures, designed to meet temporary emergencies, tended to become permanent. The number receiving the wheat dole rose steadily to 300,000. To correct this abuse, Caesar instituted a means test, and the number on dole fell to 150,000.

Some Roman leaders were impelled exclusively by political and self-seeking considerations. Others, while mindful of political implications, were motivated by true patriotism; but few realized the ulti-

mate effect of this paternalistic course on the Roman republic. These attempts at a managed economy, not unlike some modern experiences, failed, and the Roman republic became a dictatorship.

Another Welfare State

Centuries later, another government suffering from the late repercussions of war with its attendant destruction of property, passed under the leadership of a man, an idealist in many respects, self-confident, intolerant of criticism, willing to manipulate facts so as to forward his own ideas. His plans for change of government at first were limited to the combatting of financial depression. Small businesses were regulated, and new rules of business and price structure were instituted. "Reactionaries" and "selfish men" who did not go along with his "New Deal" were eliminated from the councils of the "progressives." The financial difficulties of the government, occasioned in part by the new era of spending "for the good of the people", were explained by the statement that former officials had not understood government finance. He said "A good financier can increase government revenue without increasing taxation."

The new leader saw that under free enterprise merchants and landlords were making money. He proposed to take the profits from free enterprise and to stop "monopoly" of capital by taking it away from the rich and giving it to the poor. He set up a government bureau, with large capital to deal in commodities and thus regulate prices and trade. This required a new bureau of "economic planning" and a large staff of high salaried officials, housed in new office buildings. Another heavily capitalized bureau of trade was created because the country's goods had "fallen into the hands of capitalist monopolies," and prices fluctuated to the "detriment of the government and of the poor."

Inexorably the government absorbed and destroyed small business. Farm loans and subsidies were set up, at first to the advantage and later to the ruin of the farmers, who came at last under the complete domination of the government.

One "reform" followed another, always financed by new taxes until "there was not a chicken or a pig on a farm or a beam or rafter in a roof that was not reported and registered with the government." "Like all collectivist systems, the government could not leave the people alone. It had to know exactly what they did and what they possessed," and a system of secret agents was instituted. The imperial censorate, which partook in function that of a supreme court and also that of a modern press, had to be brought under control and was packed with the party's underlings who were willing to follow the party line.

That is the story of China and of Su Tungpo in the eleventh century, as related by Lin Yutang. This experiment in state capitalism and ultimately collectivism lasted eight years and brought China to financial and social ruin, with the loss of her northern provinces. "An iron rule was clapped over the people in the holy name social reform." "This was the last of China's experiments in state capitalism, though by no means the first. In the 4,000 years of China's history, four great political experiments in totalitarianism, state capitalism, socialism and drastic social reforms were attempted and each of these failed miserably."

Our American Symptoms

Consider now our own experience. Following World War I after a temporary lull in business, easy money and some inflation led to increased speculation. The stock market boomed. Basic principles of credit and business were forgotten; morals deteriorated. Even some formerly conserv-

ative bankers were persuaded that the basis of banking credit somehow had changed and that increased borrowing increased the economic foundation of credit. This unhealthy expansion was world-wide, involving alike nations whose economic status was fundamentally solvent as well as those financially already insolvent. When the inevitable crash came, it involved nation after nation.

The depression in America (1930-34) affected the thrifty as well as those who never save. The small man whose savings were swept away, often through no fault of his own, was embittered, and accepted temporary measures of relief, which under a less severe blow, he would have refused. Work relief and other devices helped many, but at the same time sapped their sense of independence. A fertile field was provided for the growth of the welfare state. People looked with less disfavor on measures that formerly their sense of individual responsibility and independence would have led them to spurn. In such periods of economic distress, socialism thrives. Regulations directed from Washington were applied to business under the general heading of the "New Deal." Even the name seemed to afford license for disregarding fundamental constitutional and economic principles. The currency was devalued so that we now dealt with 59 cent dollars. Gold was taken out of circulation. For a time the theory was maintained that by lavish government spending we could "spend ourselves rich." A government counselor stated—"We shall tax and tax, and spend and spend, and elect and elect."

Administrative law was urged in replacement of common law of the Constitution. A National Recovery Act was passed to regulate prices and trade. This limited the freedom of the individual business man. The Supreme Court later held this act

unconstitutional, so that this facet of economic planning had to be replaced by others. A commission of economic planning was appointed, and a heavily capitalized bureau of finance was provided.

An economy of scarcity was attempted, by limiting the size of pig families and by plowing up cotton and grain. Subsidies at first attractive to the farmer later became burdensome and offensive by reason of intrusion of government into his private affairs. Governmental monopoly of planning made individual planning more and more difficult, especially for the small farmer who now found that he was unable to operate his farm business under governmental restrictions, and that he must yield still further to governmental regulation. He began to feel the pressure of the police welfare state.

Then came World War II which, in the interest of national survival, properly required the regimentation of total war. Citizens were thus increasingly conditioned to regimentation. With the close of the war, many regulations were relaxed, but not all, and citizens were induced to accept further invasion by government of their personal freedom.

This nibbling at freedom is part of the socialistic program of establishing a planned economy in a country which has always boasted of freedom of opportunity. Recently when it became evident that the administration bill for nationalization of medicine with its enormous addition to the already unbalanced budget, could not be expected to pass this Congress, the announcement was made that only parts of the plan for the welfare state would be attempted. This is the Fabian technic of placing "a foot in the door."

Federal aid to education including medical education is one of these parts in the welfare program. New money is attractive to schools which find themselves in finan-

cial difficulties. Other more prosperous schools are willing to be included. Proffers of easy administration are as dangerous to freedom of thought and action in medical education, as are offers of easy living. Every subsidy carries with it the threat of regulation, despite any disclaimer of present intent. In 1942 the Supreme Court rendered an opinion involving benefits and subsidies. An Ohio farmer maintained that his rights were invaded in violation of the 5th Amendment to the Constitution which provides that no citizen shall be deprived of life or property without due process of law. The court held that "It is hardly lack of due process (of law) for the government to regulate that which it subsidizes."

Measures of relief which should have been temporary and locally administered have become permanent through centralization in bureaucratic administrations, which, when they are started, never cease to grow. Ever new projects are initiated, each with arguments to recommend it. In the past 15 years, bureaucracies in Washington have grown apace; some have become unmanageable, even by the Congress.

Now the socialistic promoters of these measures assume that their power has grown sufficiently to make it safe to reveal their true intent. People are being advised that they have a right to demand that more and more be done for them. Our federal administration sees a wonderful chance to secure votes. After nationalization of medicine will come nationalization of businesses and of the other professions. Under the pretense of preventing monopolies such as those of business or of utilities, there has been created a great monopoly of government.

The New Deal has been outmoded and is now replaced by the Fair Deal. Under the Fair Deal we store up potatoes to rot,

and pile up grain to spoil in thousands of quonset huts, to say nothing of eggs, milk and nuts in a futile attempt to set up a planned economy. Food is withheld from the needy and destroyed in order to maintain the fiction of prosperity by subsidies. High prices for food bring about demands for increased wages with resulting increase in cost of manufactured commodities which the farmer must buy, and in the end the small farmer loses not only his freedom, but also the value of the subsidy graciously given him by a paternalistic government. The spiral of inflation, begun by wasteful governmental spending and administration is given added impetus by these abortive efforts for a planned economy.

In all this we are repeating in one form or another the ruinous experiments of ancient China and Rome, or those of more modern nations. We must discard "deals" and their unsavory connotations, and return to a sound program of honest thinking and free enterprise before it is too late. Marxian materialism must not be substituted for moral principles and for individual freedom and responsibility. The 19th Century observation of the German economist and philosopher, Fichte, that "Only a self-sufficient nation can plan" is forgotten. Under present world changes in transportation and growth of science, no nation is economically self-contained.

To administer the multiple activities of the welfare state, enforcement of regulations is necessary, and the welfare state becomes the police state. Even at such late stage many would still prefer to do for themselves, but now the police state steps in and makes this impossible, and they are told that they must allow the government to provide.

We here in America are at the point now where prohibition is being replaced by compulsion. The democracy in our republic is threatened by the steady en-

croachment of socialistic bureaucratic government. What began as an apparently innocent effort for comfort and happiness is becoming a destructive instrument of dictatorship.

The real intent of this propaganda for nationalized medicine is becoming evident to men in all walks of life. From the beginning, the attack on medicine was designed as a part of the far more serious attack on our American way of life; but this larger concept was so astounding that most of our citizens refused to believe that any of our political leaders could be so blind to the interests of our country. The socialist bait of easy living, something for nothing, everything done for the citizen by a paternalistic government and the socialist welfare state, has a great appeal to the uninformed and unthinking citizen. He must be shown that with each governmental gift, for which he himself will pay, there is imposed an additional shackle on his personal freedom.

"Freedom" and "easy living" are not synonymous now, any more than they were in our colonial days. Loaf and spend cannot replace work and save, in the economy of a free people. Willingness to accept government largesse in return for less work results in progressive loss of liberty and ultimate submission to the whip of dictatorship and communism.

Medical Standards

We must not sacrifice principles and ideals to the chimera of easy living, nor can we condone the making of false promises of government medicine and care, demanded by leaders of blocs as the price of political preferment, even though it is clearly evident that those promises cannot be kept.

Standards of quality of medical practice in the United States, the highest in the world, have been attained by educational efforts, initiated and carried forward

almost entirely by the medical profession itself. There are faults in distribution of medical care which are co-existent with economic and cultural faults, especially in sparsely settled or economically poor areas. These are being corrected, often by the communities themselves.

In all professions and businesses there are conscienceless individuals who bring discredit on their colleagues. To meet medical injustices, neglect, and overcharging, medical grievance committees have been set up by local and state medical societies to deal with such transgressions. However, these transgressions are relatively few in number compared to the vast and devoted service of physicians to their patients and to the public.

We are in the midst of a campaign to save medicine from the degrading effects, professional, financial, and moral, of the proposed nationalization of medical practice. This inspiring purpose would itself merit our wholehearted efforts. But the cause is far greater than this—it is the saving of our American institutions, our freedom, from destruction inevitable under socialism, and the police welfare state.

This campaign has for all of us a great patriotic appeal and our efforts should be directed toward the stimulation of every doctor to exert his individual effort for the saving of his country from socialism. Our cause has everything—humanity, patriotism, freedom. No cause in recent years has offered so effective a rallying point for citizens, whether physicians, other professional or business men or laboring men.

Some people pride themselves on seeing both sides of every question. They usually see so much of both sides that they take a position on the fence, to await results. We need men with convictions who are willing to voice them. Now is the time for every citizen to make up his mind whether he wants economic freedom or socialist

slavery of the welfare state.

In this campaign there is no place for double talk or double dealing—no compromise. You can't compromise on the truth. We have a great cause in which we can all unite in action as well as in purpose—that of the saving of this country from a downfall similar to that of the European nations.

THE WELFARE STATE VERSUS THE WELFARE OF THE STATE

ENOCH CALLAWAY, M.D.

LaGrange

Freedom is a word that we have all been taught to consider as synonymous with America and the American way of life. Freedom to work and study and strive for better things. Freedom to live where we want to live. Freedom to choose our occupation. Freedom to speak our thoughts. Freedom of religion. Freedom to rise to the highest pinnacle of success; or if we desire, freedom to shed responsibility and respectability and sink to the depths. Personal liberty of each individual to order and govern his own life as he desires so long as he does not infringe on the same rights of others. On this foundation of personal freedom and individual initiative the United States has grown and prospered and has become the leading nation of the world in science, art, literature and industry. The welfare of the State has steadily and consistently advanced.

This freedom which we have enjoyed for a century and a half is being threatened. It is not only being threatened; it has already been partly destroyed. Much ground has been lost which must be regained. The enemy must be known and must be fought on every front. No point can be given.

President's address to the Medical Association of Georgia at its 100th session, Macon, April 19, 1950.

No compromise can be made.

The terms Welfare State, Social Security, Planned Economy and other similar phrases in themselves have pleasant heartwarming connotations, carrying to mind immediately a vision of all those things which we have been taught and trained to consider desirable. Many persons are apt to accept these terms as being absolutely identical with their own religious and humanitarian concepts of the duty that one individual owes to another. It can be shown that when used in a political and economic sense this is far from true.

Communist, Welfare State Advocates, Economic Planners, Fascists, and Nazis are all socialists who differ only in one respect, and that is as to who shall control the nation when democracy has been destroyed. They all desire complete state control over all industries, individuals, and commodities. Up to a certain point they will work together. Like a pack of wild dogs, they will cooperate to bring down the quarry, each hoping to be able to gain control after the kill. Since the communist adheres to a foreign government, his presence in the pack has now become a liability. He can be recognized as a wolf, so he must be eliminated to divert attention from the socialistic aims of his former mates.

Many group leaders who are now courting public favor by diligently purging communists from the ranks of their organizations are socialists of another breed and are equally anxious to destroy the traditional American way of life.

The idea of the Welfare State is not new. As far back as we have written history, we find that this plan has been used to undermine the morale of free peoples so that they would become subservient to the state. Where this has succeeded and the individual has become convinced that it was not his duty to see to the welfare of the state but the duty of the state to see

to his welfare, neither the state nor the citizen has long maintained their freedom.

Demosthenes in the *Philippics* frequently referred to the fact that the power and virility of Athens was being destroyed by the citizens considering the state responsible for their welfare. This reversal of responsibilities inevitably led to a personal and national degeneration of character which caused the glory that was once Greece, to be but a memory. Hannibal fought in Italy for the very existence of Carthage, using mercenary soldiers, while her citizens enjoyed all of the benefits of a welfare state at home. The exact site of this once powerful city is not now known. Rome followed the same road and suffered the same fate. Germany and Italy have also tried the welfare state and failed. England is now on the brink of utter disaster.

Let us briefly view the road to this promised Utopia. Where does it actually lead? How far have we traveled it? Does it lead to Utopia or does it lead to individual slavery and national ruin?

The creeping revolution slipping stealthily upon this nation is not of the Russian Communist type, but is the same type which has taken over England. By considering recent developments in England, we may best view the parallel road we are traveling. England started on this road in 1883 when the Fabian Society was organized. Their method is called Fabian Socialism. Quintus Fabius, the Roman General, held that the only way to defeat Hannibal was to avoid a general engagement and by strategic withdrawals lure him into battle in small sectors and then defeat him in sections.

The Fabians in England began by advocating not a socialist state, but a welfare state. Constantly promising increasing government benefits to the voters in return for their support. Constantly telling the

working man that these benefits would be given by taxing industry and the rich, the English Socialists now control the Bank of England and thereby all credits, cables and wireless, civil aviation, railways, passenger buses, cargo trucks, inland waterways, coal mines, electricity, gas and *medical services*.

This is the road: *The use of handouts to individuals and localities to justify taxes and to gain support in elections.*

Where does this road lead? One cannot read newspapers or listen to the radio without becoming well acquainted with the sad plight of the English people who have traveled this road. The once well fed British now are on bare maintenance food allowance, insufficient fuel and scanty clothing, all of which justly stir in us pity for the sad conditions which would be even worse except for Marshall Plan aid from Capitalistic America. I will quote from their own minister of finance to show to what condition their national finances have fallen. He stated that any additional benefits could only be given by taxing wages, *as individual incomes and businesses had been taxed to the limit.*

There are now less than one hundred individuals in England with incomes above twenty-five thousand dollars a year.

John L. Lewis who is far from a prejudiced friend of Capitalism, states, and I quote, "Let us begin with the case of Great Britain. The population there is sitting on a coal deposit which, if taken from the earth by modern methods, would solve the economic problem of the British. But first British management made the mistake of letting obsolescence weaken the industry. And then British labor made the mistake of becoming a political party and using the political instead of the economic approach to National problems. The result is what you see."

"In 1948 American miners took out approximately six hundred million tons. British miners took out less than two hundred million tons, and in this country the mining force was four hundred, four thousand and in Britain it was seven hundred, thirty-nine thousand."

Statements such as these made not by opponents of socialism, but by proponents of socialism or socialistic trends, show very clearly that the road leads to high taxes which ultimately must be assumed by the laborer who will then be handicapped by inefficient management and obsolete and dangerous equipment. By now he is bound to his job and does not have the freedom to leave. He has sold his liberty for a promise of security. He must work under hopeless conditions or have his ration card revoked and starve.

Even though his wages are high, production has dropped to such a low point that only the barest necessities of life are available.

The following verse by Rudyard Kipling aptly describes all the ghastly failures of socialism going on in England today.

In the Carboniferous Epoch we were promised abundance for all.

By robbing selected Peter to pay for collective Paul.

But, though we had plenty of money, there was nothing our money could buy.

And the Gods of the Copybook Headings said: If you don't work you die.

How far have we traveled this road? We have traveled this road much farther than most of our citizens realize. Through grants to cities, counties and states, the Federal Government has gained partial or complete control of many essentially local matters. Local governments have lost authority to the Federal Government at many points and the Federal Government continues to encroach upon the duties traditionally regarded as belonging to the states, particularly concerning tax matters. In 1916, 23.7 per cent of taxes paid went

to the U. S. Treasury, while this year 84.93 per cent of your taxes will be paid to the National Government. The average Georgia citizen must work two and one-half months this year to earn his tax payments. Last year the Federal Government collected eleven times as much taxes from this State as it returned.

This return of taxes to the states is very interesting and should be very carefully considered. Why should we pay taxes to the Federal Government and have them return as a gift for local use? Are we unable to collect our own taxes? Are we incompetent to decide how they should be used? The answers of course are apparent.

As to how efficiently and economically the Federal Government does this for us can easily be learned.

We are all, as doctors, interested in the Hill-Burton Act which allows the Federal Government to make grants-in-aid for the construction of hospitals. This act, I believe, is administered as well or better than any other Federal agency. For this reason I have asked for and obtained from Governmental agencies a statement of money spent under this Act with a statement or an estimate of the amount which had or would eventually be actually paid to contractors. *Out of three hundred million dollars, contractors will receive two hundred nineteen million.* The three hundred million does not include salaries of public health officers assigned to this work. *We pay approximately 30 per cent for the privileges of having our taxes handled on a National basis.*

States, cities and counties cannot collect taxes from any project financed by the Federal Government as long as the title to the property rests with the Federal Government. This applies to housing projects, power projects and many other types of property financed through Federal loans. This property increases each year and

forms a considerable part of the source of taxes for local use. At the present time most but not all of such authorities are paying by administrative order 85 to 95 per cent of the amount of state, county and city taxes as a grant. This is a dangerous situation. Since the money is being paid, our local authorities are lulled into a sense of security from which they could be suddenly and rudely awakened by the stroke of a bureaucratic pen.

As Federal taxes increase, the ability to assess and collect taxes on a state and local level decreases and we become more and more dependent on Federal grants for local needs. This is a vicious cycle and can only lead to ultimate destruction of local self-government and absolute dependency on the National Treasury. Economic dependency goes hand in hand with loss of freedom and liberty.

Although we are paying in Federal taxes the staggering sum of thirty-seven billion, three hundred million dollars yearly, last year there was a deficit of five billion, five hundred million. On top of this, President Truman wishes to impose a cost for socialized medicine which can easily exceed twelve billion dollars. This in the face of imminent National bankruptcy and in a country with the finest medical service and best condition of health in the world. As a physician and as your retiring president, I am proud to say that America today has the most widely applied medical service and the most extensive hospitalization ever achieved in any country. Here in Georgia this Association was chiefly instrumental in the passage, by the recent Legislature, of two bills designed to provide broad hospital and medical care insurance well within the reach of the low income group. This is our strong and positive answer to an impossible socialistic medical scheme.

For the lowest income groups, we have the services of free clinics. Recently an

old man living near Raymond wrote a letter asking for aid for a cancer on his face. This letter was addressed to Cancer Hospital, no town, street or state. The postal clerk, using his freedom of decision, which would have been unheard of under Socialism, delivered the letter to the Cancer Society and immediate action was taken. A private physician from Newnan visited him, an emergency application was made, and seventy-two hours after mailing his letter the patient was receiving care in the City-County Hospital, LaGrange. Under a system of Nationalized Medicine, I am willing to say that I believe if the old man had survived without medical care, he would still be filling out application forms for hospitalization.

The care of the individual by the State, which is the chief stock in trade of the proponents of a Welfare State, is not and never has been motivated by high ideals, but by a desire to gain and hold absolute control over people to whom the apparent benefits are being directed. The ultimate effect, if indeed one does not consider it the primary aim, is to make the mass of the population so dependent for the necessities of life on handouts that they do not dare oppose or vote against the party in power. This can very rapidly develop an obligatory one party system which can easily be controlled by a small group, or even by one individual, with the subsequent results of totalitarianism which are only too well known to us all.

As the Welfare State grows and more and more taxes and benefits are added, it becomes increasingly necessary to enforce the collection of taxes and curtail the improper distributions of benefits by the use of police power. Gradually the right of the citizen to be free from search without a specific warrant becomes abridged. This has already happened here to some extent. As police power is built up, its use, at first

to annoy, and later arbitrarily to suppress political opposition becomes a natural and inevitable consequence. Anyone keeping up with current events must be alarmed by the fear that we are even now entering the phase of police annoyance which is only countered by the fact that many of our judges are still free from the control of the proponents of socialism.

The socialization of medicine is only one aspect of the danger of socialism. I have said repeatedly, and here again emphatically state, that I oppose the Truman Health Scheme more as a citizen than I do as a doctor. On every front the gradual process is being pushed. There is a constant effort being made to enlarge the powers of the President at the expense of Congress and the courts. Government control of banking, credit and security exchanges is being gradually increased. More and more housing is being Government-controlled or owned. I have a definite suspicion that forfeiture of housing to the Government is being encouraged. The socialization of medicine and indoctrination of youth camps are essentials which have not yet been accomplished even in part. Revival of the Civilian Conservation Corps should be viewed with grave suspicion.

Many of our Congressmen assure us that the danger is closer and more imminent than we suspect. The present situation is critical and only a small step is needed before the ultimate end of the Welfare State will be reached. Then it will no longer be a Welfare State, but a police state and the welfare of the State will become secondary to the individual desires of a totalitarian group.

The Welfare State road has been traveled before by many nations and led to ruin. No other Nation once entering this road has turned back before reaching destruction. Can we, the first Nation to establish the sanctity and dignity of individual

human rights accomplish this reversal? I not only believe we can, but also am firmly convinced that we will. This will not be easy. We must be willing to sacrifice our pet projects, suffer financial loss and personal disappointments, keeping constantly in mind that the ultimate welfare of the individual depends on the Welfare of the State. We must keep in mind that the marvelous heritage of freedom which we received from our forefathers is not ours to squander and destroy, but a sacred trust to be passed intact to our children, to be enjoyed by generations to come.

We must not only fight the socialization of medicine, but socialism wherever it becomes manifest.

Human freedom should be protected. No single personal liberty should be given up for any price.

We should forget political affiliations and remember that voting for a man who favors socialism is being a traitor to our principles.

Our representatives should be elected on a basis of uncompromising leadership. Compromise leads to ultimate defeat.

Socialistic indoctrination through press, radio and in the school room should be counteracted by the same methods used by our enemies.

Socialization must not be allowed to advance. It must not only be stopped, but it must be pushed back and destroyed.

The following quotation from Washington's Farewell Address is very appropriate at this point. "As a very important source of strength and security, cherish public credit. One method of preserving it is to use it as sparingly as possible, avoiding occasions of expense by cultivating peace, but remembering, also, that timely disbursements, to prepare for danger, frequently prevent much greater disbursements to repel it; avoiding likewise the accumulation of debt, not only by shunning occa-

sions of expense, but by vigorous exertions, in time of peace, to discharge the debts which unavoidable wars may have occasioned, not ungenerously throwing upon posterity the burden which we ourselves ought to bear."

The power of the Federal Government to tax must be curtailed. Unless this is done, the continual tendency to tax and bribe will continue until all local and personal liberty will be gone. Freedom will have perished from the earth. The welfare of our State, like the glories that were Greece, will be but a memory.

CAROTID SINUS SYNDROME

C. RAYMOND ARP, M.D.

HAL M. DAVISON, M.D.

and

JOHN S. ATWATER, M.D.

Atlanta

The carotid sinus reflex and its disorders have been studied intensively by both foreign and American workers, the latter group concentrating their study in the past two decades. However, this subject has not been presented before our Association in recent years. The purpose of this presentation is to recall this important problem to our attention and to report some observations on the routine testing of this reflex in patients seen in the private practice of medicine.

A short history of the recognition of the carotid sinus syndrome was given in the excellent study of Weiss and Baker¹. In 1799 P. H. Parry² reported the observation that in some patients whose hearts were beating with undue quickness and force, pressure over one of the carotid arteries caused slowing by many pulsations per minute.

Read before the Medical Association of Georgia in annual session, Savannah, May 13, 1949.

In 1862 Waller³ reported a similar reaction, but stated that there is initial acceleration with subsequent slowing of four to five beats per minute. He attributed this to irritation of the vagus and sympathetic nerves by pressure on the carotid artery.

In 1866 Czermak⁴ noticed a swelling of one of his own carotid arteries and that pressure on it produced slowing of the heart rate. He decided it was due to stimulation of the vagus nerve.

In 1923 Hering⁵ demonstrated a similar slowing of the heart rate in animals by pressure on the dilated portion of the bifurcating common carotid artery (carotid sinus), even after the vagus nerve was separated from the artery.

The carotid sinus reflex is normally one of the mechanisms in man that regulates blood flow to various parts of the body. The carotid sinus syndrome is the symptom complex which results from accidental stimulation of a carotid sinus which, for some unknown reason, is hypersensitive. The symptoms that usually cause the patient to consult his physician are intermittent attacks of extreme vertigo or loss of consciousness, and at times, convulsive seizures. When a large number of so-called epileptics in a large mental institution were carefully tested, it was found that a goodly number merely were cases of carotid sinus hypersensitivity and had been confined needlessly.

It was thought by the early investigators that the symptoms and signs were produced by stimulation of the vagus, or of the vagus and sympathetic nerves. As mentioned above, Hering and his group showed this was not true in dogs by sectioning both vagus nerves and obtaining the same symptoms by pressure on the carotid sinus.

Hering⁵ and his followers, Koch,^{6,7} and Huymans^{8,9} and his associates, and de Castro¹⁰ demonstrated that the dilated portion

of the bifurcating common carotid artery (carotid sinus) is richly supplied with sensory receptors which terminate in characteristic menisci. From these the sinus nerve of Hering (the inter-carotid nerve of de Castro) is formed and corresponds to the "ramus caroticus hypoglossie". This nerve joins the glossopharyngeal nerve giving direct connection between the carotid sinus and the medullary centers.

Smith¹¹ states that the carotid sinus is a bulbous dilatation of the first portion of the internal carotid artery and that its wall is thinner than other portions of the artery and contains special nerve cells called nerve receptors.

Code and Dingle¹², working on dogs, used electrical stimulation of the nerves, stimulation by raising and lowering pressure in the isolated sinus section and survival denervation experiments. They found that the carotid sinus has three possible sources of nerve supply: (1) glossopharyngeal nerve, (2) from the superior cervical ganglion, and (3) a minute, variable twig which passes upward along the medial side of the internal carotid artery from the carotid sinus, accompanying the internal carotid artery into the skull and communicates with the nodose ganglion of the vagus nerve. Evulsion of the carotid sinus nerve alone without impairing the functions of other nerves in the region of the blood supply to the head removes the regulatory influence of the sinus on the heart rate and blood pressure. Code, Dingle and Morehouse¹³ found on detailed dissection in 25 dogs that the nerve of Hering arises from the glossopharyngeal nerve shortly after it issues from the jugular foramen of the skull. It usually communicates with a large branch from the superior cervical ganglion. It usually is distributed mainly to the posterior aspect of the carotid sinus and carotid body. A small, more variable,

nerve accompanies the internal carotid artery into the skull and may communicate with the nodose ganglion of the vagus nerve.

Bucy¹⁴ reported observations after section of one glossopharyngeal nerve in four cases. There was an immediate rise in blood pressure, then a slight fall, and a secondary rise in blood pressure in twelve to sixteen hours which persisted for five to twelve days. Ray and Stewart¹⁵ in 1942 reported four cases, and in 1948 reported 15 more cases of section of the glossopharyngeal nerve for relief of neuralgia. In all but four of the 19 cases there was a transient rise in blood pressure and heart rate, returning to normal within three days. This return to normal indicates a compensation by other regulatory mechanisms. After section of the glossopharyngeal nerve, pressure on the carotid sinus of the side operated on caused no reaction, but procainization of this same sinus caused a rise in blood pressure, even though it was to a lesser degree than is usually seen. Tests were made from two weeks to five years postoperatively, ruling out the possibility of regeneration of the nerve. These observations show that the impulses of the carotid sinus reflex are not solely transmitted through the glossopharyngeal nerve. In one case there was traumatic paralysis of the vagus nerve at the time of intracranial division of the glossopharyngeal nerve. Postoperative procainization of the homolateral carotid sinus did not result in elevation of blood pressure and cardiac rate as had been seen in the cases with an intact vagus nerve. In a related experiment they have shown that chemical stimulation of the carotid sinus with sodium cyanide resulted in a reflex which traveled pathways other than the glossopharyngeal nerve. This must have been by way of the vagus, sympathetic, or hypoglossal nerves.

The effect of section of the glossopharyngeal nerve was also shown by Weiss and

Baker¹. Denervation of the carotid sinus gave the same result. Pinching the vagus during the operation did not produce these results.

Bronk and Stella¹⁶ have shown that in rabbits there is a rhythmic discharge of nervous impulses over the carotid sinus nerve as long as the pressure within the sinus nerve is about 40 mm. of mercury. The rate of discharge is in proportion to pressure. The higher the pressure, the faster is the rate of discharge. Sections of the nerves interrupts a constant flow of depressor impulses to the vasomotor centers of the brain, resulting in hypertension.

A quantitative inter-relationship between the degree of alteration in the heart rate and of the blood pressure due to a depressor vascular reflex was also shown by Koch⁷, and by Huymans and Bouckaert⁹ in different species of mammals. Huymans⁸ demonstrated that the continuous secretion of epinephrine is reflexly controlled by the afferent aortic and carotid sinus nerves. Thus the carotid sinus controls the circulation not only directly, but indirectly through chemical regulation.

According to Weiss, Capps, Ferris, and Munro¹⁷, stimulation of the reflex may be in the form of a stretching of the wall of the carotid sinus from distention within, or a relaxation by decrease of the arterial contents. Hormones or other chemical substances, such as sodium cyanide, can stimulate the carotid sinus (Weiss & Baker¹).

Thus, it is well established that the carotid sinus reflex arises in nerve receptors in the wall of the carotid sinus, which is a bulbous dilatation of the common carotid artery at its bifurcation, or the first part of the internal carotid artery. It is transmitted centrally by the nerve of Hering (inter-carotid nerve, or carotid sinus nerve) to the vasomotor and respiratory centers of the brain, to the superior cervical sympathetic

ganglion and often, at least, to the nodose ganglion of the vagus nerve. The carotid sinus nerve at times communicates with the hypoglossal.

The efferent paths may be through the vagus nerve, through the aortic depressor nerves, or may act centrally on the medulla and be distributed from there as motor impulses directly to certain vegetative centers in the region of the hypothalamus or the blood vessels that supply such centers (Weiss et al¹⁷). There may be a combination of these three or any two of them. Thus, there are three types of response:

1. *Vagal type*: In this type the symptoms are due to cardiac standstill or asystole which in turn is due to sino-auricular or auriculoventricular block. This results in cerebral anoxemia which causes the symptoms.

2. *Depressor type*: In this type the efferent impulse travels through the aortic depressor nerves (sympathetics), resulting in reflex dilatation of the small blood vessels including the splanchnics and secondarily causes a fall in blood pressure without any slowing of the heart rate, asystole, or other disturbance of heart rhythm. Symptoms result again from cerebral anoxemia. This is the least common type and usually accompanies one of the other two types.

3. *Cerebral type*: In this type the effect is apparently due to direct effect on vegetative centers in the brain or the blood vessels that supply them and cerebral anoxemia results even with no change in heart rate or rhythm and no change in blood pressure.

When there is a mixed type it should be classified according to which of these three predominates. The vagus type, as one would expect, can be abolished by the administration of atropine in adequate amounts, which will have no effect on the other two types.

The depressor type can be aborted by epinephrine by its action on the small blood

vessels and ephedrine often is effective in preventing attacks.

The cerebral type is not influenced by atropine, epinephrine, or ephedrine.

Infiltration of the region of the carotid sinus with procaine will make it insensitive to stimulation of all kinds and thus will prevent all three types of reactions.

Numerous factors will influence the sensitivity of the carotid sinus reflex. It is more frequently sensitive when other diseases or conditions are present, such as arteriosclerosis, hypertension, heart disease, cervical lymphadenopathy, syphilis, neurosis, and carotid body tumor. McSwain and Spencer¹⁸ reported one case of carotid body tumor associated with carotid sinus syndrome and states that this makes a total of 197 reported in English literature.

Chemical influences, especially digitalis, are important in increasing the sensitivity of the reflex. If digitalis is given to a cardiac patient who complains of dizziness, fainting, or weakness because he is suspected of having congestive heart failure, it will make him worse instead of better if he is suffering from carotid sinus syndrome. Downs¹⁹ reports one surgical death and tells of others that he thought were due to sensitive carotid sinus reflex. He produced a similar picture in susceptible dogs. All were not susceptible. He concluded that nitrous oxide anesthesia made the reflex more active and accidental pressure on the carotid sinus by the anesthetist in adjusting the mask or maintaining the position of the head can be the cause of this syndrome. Rovenstine and Cullen²⁰ report that digitalis and morphine make the reflex more active and that low oxygen or high carbon dioxide tension of inspired atmosphere in anesthesia is more dangerous in patients with an abnormal carotid sinus reflex. Barbituric acid derivatives make it less sensitive and ether, vinethane, and chloroform

depress the reflex when deep narcosis is obtained but light anesthesia will usually make it more sensitive.

Clinical Symptoms

The most dramatic symptoms are sudden unconsciousness with or without convulsions. The convulsions are usually preceded by an aura of weakness, dizziness, nausea, dyspnea, pallor of the face, tingling of the extremities, loss of vision, epigastric distress, faintness, profuse perspiration, spots before the eyes, staggering or tinnitus. During the convulsion there is no biting of the tongue and no loss of sphincter control. There are definite and often vigorous clonic movements, at first on the contra-lateral side and then generalized. Dilatation of the ipsilateral pupil, strabismus, lacrimation, labored deep respiration, states resembling catalepsy may occur. Unconsciousness may last a few seconds to 15 minutes or more. There may be a temporary loss of memory.

Symptoms almost always occur when the patient is in the upright position and are relieved by lying down at the first warning, although frequently there are no warning symptoms. Fatigue, menstruation, or emotional upsets may act as precipitating factors. Quick movements of the head to one side or the other, looking back over the shoulder with rotation of the head, as when driving a car, may exert enough pressure on the carotid sinus to result in an attack. This syndrome was long known as "Minister's disease" when it was customary for the ministers to wear tall stiff collars. On leaning the head forward to read from the Bible, or in prayer, one would exert enough pressure on the sinus by the stiff collar to initiate an attack. Sudden changes of position of the head from horizontal to vertical, or vice versa, may cause it.

Diagnosis is made by reproducing the signs and symptoms on mechanical stimulation of the carotid sinus reflex by pressure

on one of the carotid sinuses. They should not both be stimulated at the same time. The test is best done with the patient in the sitting position. The head should be tilted backward and rotated away from the side to be tested. The bulbar dilatation of the internal carotid artery then can usually be seen or easily palpated. It is usually near the angle of the jaw, but its position is quite variable and may be as low in the neck as the inferior border of the thyroid cartilage. It is best to exert pressure with the index, middle, and ring fingers all at the same time, so that all of the sinus will be covered. It is then compressed against the transverse processes of the cervical vertebrae. Pressure should be initiated quickly and not gradually. The degree of reaction is directly proportional to the suddenness of pressure, as well as to the degree of pressure. Gentle massage often will accentuate the reflex. Pressure should be maintained for 40 seconds. Counting of the pulse rate and the taking of blood pressure should be started as soon as pressure is begun, since, in many people, the pulse will slow considerably, but in five to thirty seconds, will return to normal, even though pressure on the sinus is maintained. The electrocardiogram can be made and changes in heart rate and rhythm can be recorded during the test. It is important to determine the type of reflex—vagal, depressor, or cerebral, as described above. Pressure above or below the carotid sinus will cause no reaction and further proof of the diagnosis can be obtained by procainization of the sinus. This will prevent a reaction when pressure is again applied (Peck and Wertheim²²).

Treatment should first be directed at any disease or physical abnormality that may be influencing the reflex, such as removal of carotid body tumor, or treatment of enlarged cervical lymph nodes, no matter what the etiologic agent. In digitalis intoxi-

TABLE 1
Carotid Sinus Reflex Symptoms

	97 Reactors on Routine Examination		34 Reactors Tested With Special Care to Technic	
	<i>Number</i>	<i>Per cent</i>	<i>Number</i>	<i>Per cent</i>
Asystole	13	13	0	0
Convulsions	0	0	2	6
Syncope	5	5	4	12
Bradycardia-severe 40-60/min. decrease.....	30	31	6	18
Bradycardia-moderate 10-40/min. decrease.....	49	50	16	48
Vertigo	38	38	13	39
Hyperpnea	1	1	16	48
Visual Disturbance	8	8	5	15
Pallor	3	3	6	18
Tingling of extremities	2	2	4	12
Numbness of extremities	1	1	1	3
Epigastric distress	1	1	0	0
Nausea	1	1	1	3
Sweating	0	0	2	6
Faintness	0	0	7	21
Cardiac irregularity	0	0	1	3
Patients showing reaction.....	97	100	34	100

cation, reducing the dose of digitalis may be all that is necessary to control the symptoms. Avoidance of excessive fatigue, worries, and emotional upsets may be very helpful. Tight, starched collars should not be used.

1. *Vagal Type*—Atropine sulfate, 1/150 grain, by mouth 3 or 4 times a day or an equivalent amount of tincture of belladonna is effective. Ephedrine hydrochloride, grain 1/2, 3 times a day is often satisfactory and it can be combined with a barbiturate to avoid causing nervousness.

2. *Depressor Type*—Ephedrine hydrochloride, grain 1/2, with or without a barbiturate is the drug of choice in this type.

3. *Cerebral Type*—Medications are of no help in this type, but surgical denervation of the carotid sinus will abolish this type of reflex as well as the other two types. If treatment of the patients' health in general and correction of other disease processes in the body or local tumors in the neck fail to control symptoms, one may have to resort to operation. Surgical treatment has been well described by Cattell and Welch²¹ and by Ray and Stewart¹⁵. The latter authors report relief of the carotid sinus syndrome by intracranial section of the glossopharyngeal nerve.

Stevenson and Moreton²² have reported 24 cases of carotid sinus syndrome treated by x-ray therapy. Eight had the cerebral type and 16 had the vagal type. Most of these patients had two or more courses of x-ray therapy. Ten obtained complete relief, six partial relief, four slight relief, and three obtained no relief. One patient could not be traced. Four of these patients were observed from 1939 until December 1946, and three of them had no attacks. The fourth had mild and less frequent attacks.

In our study the carotid sinus reflex was checked by us, four different examiners, routinely on physical examinations. Each examiner followed his own technic with no attempt at standardization.

Observations consisted only of noting whether there was cardiac slowing or asystole or any subjective symptoms. In 337 examinations 71 patients, or 21.3 per cent, showed some reaction. Table 1 summarizes the symptoms observed in these 71 and an additional 26.

Two of us then checked a series of 40 patients, using more careful technic as described above, and taking blood pressure and pulse determinations before and during carotid sinus pressure. The results are

summarized also in Table 1. The much higher percentage of noticeable reactions shows clearly the variations that occur according to proficiency of the examiner. Of 40 patients tested 34, or 85 per cent, showed some reaction. Locating the bulbous dilatation of the artery and putting pressure directly on it instead of haphazardly pressing on the neck under the angle of the jaw and maintaining pressure for 40 seconds seemed to be the two most important factors. Applying pressure suddenly instead of gradually also was important in our experience.

In attempting to make a movie of typical reactions, five patients who had shown asystole and/or syncope, were gotten together on a Sunday afternoon. There was considerable excitement and conversation among them while waiting for the photographers. Interestingly enough, only one of the five showed a good reaction. We attribute this to either the improvement of their general health and primary illness since the time of their first examination, or to the increased output of epinephrine during their excitement, or both.

Some patients showed no reaction while pressure was applied, but noted dizziness or visual disturbance when pressure was released.

These examinations were done on people coming to us with some complaint and so most of them had some associated organic or psychic abnormality. Table 2 gives a summary of these. The number with allergic conditions is greater than one would ordinarily find, because approximately 50 per cent of our patients have some allergic condition.

The distribution according to age is given in Table 3. The greatest number occur in the fifth decade of life.

Difference in sex distribution was not too great, there being 54 males and 43 females in the group of 97 reactors.

Table 4 presents the changes in pulse as observed in the group of 40 patients that were carefully tested and observed. Patients that had a lowering of pulse rate by pressure on each carotid sinus are credited to the side showing the greatest change. The blood pressure changes as observed in the 40 patients in whom it was checked are recorded in Table 5. It is surprising to note that in an appreciable number there was an elevation in the blood pressure. Frequently this occurred after one side had been checked and during the stimulation of the second. This was found usually in a person who, in the beginning, was apprehensive because of having this special test, which required a nurse taking the pulse on one arm, a doctor taking the blood pressure on the arm, and another doctor "choking" the neck. The apprehension was magnified if the patient experienced unpleasant symptoms, such as tingling, blindness, faintness, etc., or experienced too much discomfort due to the firm pressure used on the first side tested.

Determining the type of reaction can be done only if one counts the pulse and takes the blood pressure as the carotid sinus is stimulated. In our series, therefore, the type was determined only in 34 patients, and of these 19 were vagal, 3 were depressor, and 12 were cerebral. In the mixed reactions the patient's classification was determined according to which of the three types of reactions predominated. The depressor type occurred three times associated with the vagal and one time associated with the cerebral type.

A negative reaction was arbitrarily defined as one that produced no objective or subjective symptoms, did not reduce the pulse rate as much as ten beats per minute, and did not lower the systolic or the diastolic blood pressure as much as 10 mm. of mercury.

TABLE 2

Carotid Sinus Reflex Symptoms:

Accompanying psychic and/or somatic conditions.

Allergic Coryza	43	Hypertension (over 150S/90D)	8
Blood cholesterol over 200 mg. per cent	35	Duodenal ulcer	7
Asthma, bronchial	26	Menopause (symptomatic)	7
Obesity	19	Diabetic or "Prediabetic"	6
Eczema	17	Arteriosclerotic heart disease	6
Gastro-intestinal allergy	17	Hypochlorhydria	5
Migraine headache	15	Hypertensive heart disease	4
Neurosis	13	Hypotension	3
Anemia	13	Peripheral neuritis	3
Underweight	13	Paroxysmal tachycardia	3
Urticaria	11	Lues	2
Colitis	10	Angioneuritic edema	2
Pyorrhea	8	Gastric ulcer	2
Arteriosclerosis (excessive for age)	8	Avitaminosis	2
		Rheumatic heart disease	1

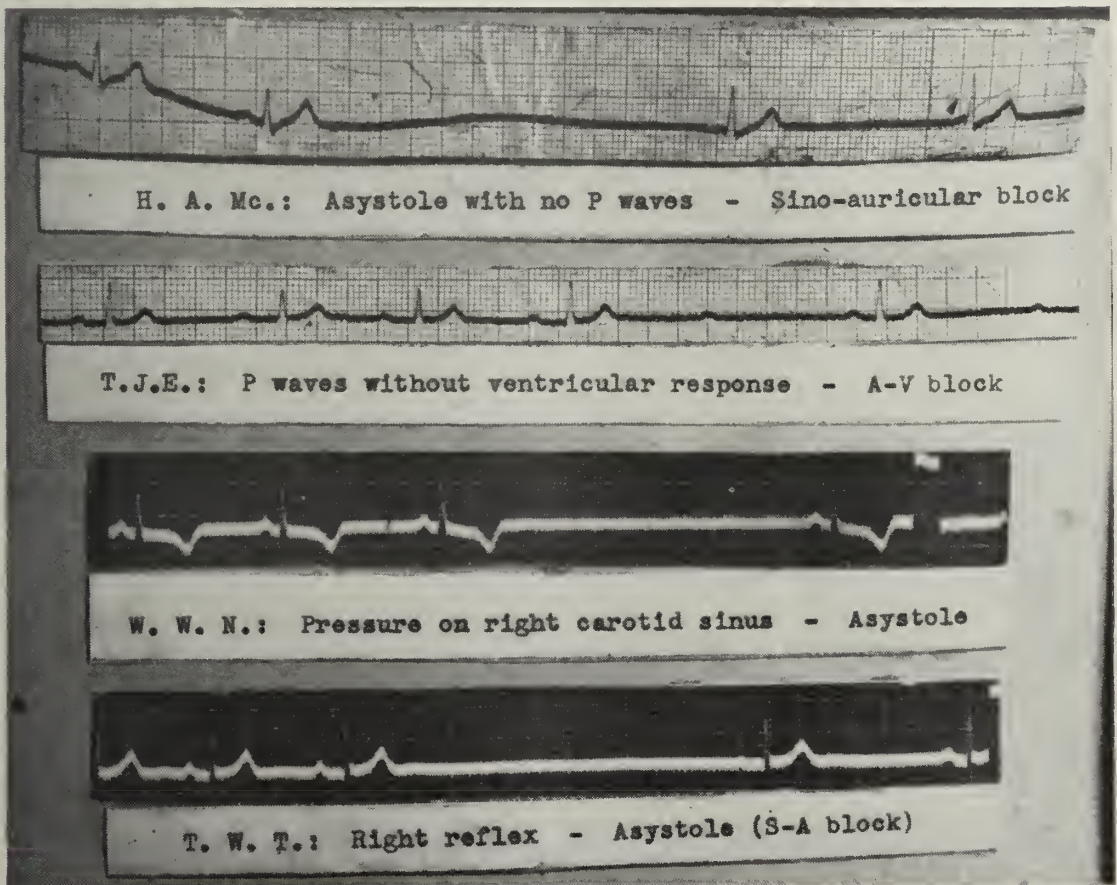


TABLE 3

Carotid Sinus Reflex Symptoms

Age Group	Number
0 — 10 yrs.	0
11 — 20 yrs.	4
21 — 30 yrs.	12
31 — 40 yrs.	19
41 — 50 yrs.	28
51 — 60 yrs.	23
61 — 70 yrs.	9
71 — 80 yrs.	2
81 — 90 yrs.	0
TOTAL	97

Summary

1. Attention is called to the carotid sinus syndrome because it seems likely that it is often overlooked as a cause of dizziness, faintness, convulsions, and syncope and as a cause of sudden anesthetic death.

2. A brief review of the literature is given.

TABLE 4

Carotid Sinus Reflex Symptoms: Pulse Changes

Decrease per minute in 40 patients.	Pressure on left carotid sinus	Pressure on right carotid sinus	Total left and right	Per cent
Less than 10.....	19	19	19	48
10 to 20.....	7	5	12	30
21 to 40.....	3	5	8	20
41 to 60.....	1	0	1	2
Total 10 to 60.....	11	10	21	52
Asystole.....	0	0	0	0

TABLE 5

Carotid Sinus Reflex Symptoms: Blood Pressure Changes

Fall in blood pressure Systolic and/or Diastolic in 40 patients	Pressure on left carotid sinus	Pressure on right carotid sinus	Total	Per cent
Less than 10 mm. Hg.....	31	31	31	78
10-20.....	2	2	4	10
21-30.....	2	2	4	10
31-40.....	0	1	1	.025
41-50.....	0	0	0	0
Total 10-50.....	4	5	9	22.5
Rise in Blood pressure				
Less than 10 mm. Hg.....	20	20	20	50
10-20.....	4	13	17	42.5
21-30.....	0	2	2	5
31-40.....	0	1	1	2.5
41-50.....	0	0	0	0
Total 10-50.....	4	16	20	50

3. Observations on routine examinations of the carotid sinus reflex in a practice of internal medicine and allergy are presented.

4. The variations in number and severity of reactions according to the efficiency of the examiner is demonstrated.

5. Kodachrome movies of the reactions are shown.

BIBLIOGRAPHY

1. Weiss, Soma, and Baker, James P.: The Carotid Sinus Reflex in Health and Disease. Its Role in the Causation of Fainting and Convulsions, *Medicine* vol. 12, no. 3 (Sept.) 1933.
2. Parry, P. H.: An Inquiry Into the Symptoms and Causes of Syncopies Anginosa Commonly Called Angina Pectoris, Art Cruttwell, Bath., 1799.
3. Waller, A.: Experimental Researches on the Functions of the Vagus and Cerebral Sympathetic Nerves in Man, *Proc. Roy. Soc. Med.* 11:302, 1882.
4. Czermak, J.: Eeber Mechanische Vagus Reizund Beim Menschen, *Jenaisch Ztschr. f. Med. u. Naturwiss.* 2:384, 1866.
5. Hering, H. E.: Die Karotissinusreflexe auf Herz und Gefasse, The Stinkopfs, Dresden, & Leipzig, 1927.
6. Koch, E.: Munchen. med. Wehnschr. 71:704, 1924.
7. Koch, E.: The Steinkopff, Dresden & Leipzig, 1931.
8. Heymans, C.: The Carotid Sinus and The Other Reflexogenic Vasosensitive Zones, London, H. K. Lewis and Company, 1929.
9. Heymans, C., and Bouckaert, J. J.: Vasomotor Reflexes, *Colbt. Rend. Soc. de biol.* 103:31, 1930.
10. deCastro, F.: Tra. Lab. Recherch, Madrid. 25:331, 1928.
11. Smith, Harry L.: A Consideration of the Hyperactive Carotid Sinus Reflex Syndrome, *M. Clin. North America*, 31:841, 1947.
12. Code, C. F., and Dingle, W. T.: The Carotid Sinus Nerve, *Proc. Staff Meet, Mayo Clin.* 10:129 (Feb.) 1935.

13. Code, C. F., and Dingle, W. T.: The Cardiovascular Carotid Sinus Reflex, *Am. J. Physiol.* 115:249 (April) 1936.

14. Bucy, Paul C.: Carotid Sinus Nerve in Man, *Arch. Int. Med.* 58:418, 1936.

15. Racy, C. S. and Stewart, H. J.: The Role of the Glossopharyngeal Nerve in the Carotid Sinus Syndrome by Intracranial Section of the Glossopharyngeal Nerve, *Surgery* 23:411, 1948.

16. Bronk, D. W., and Stella, G.: Afferent Impulses in the Carotid Sinus Nerve, *J. Cell. & Comp. Physiol.* 1:113-130, 1932.

17. Weiss, Soma; Capps, R. B.; Ferring, E. P., Jr., and Munro, Donald: Syncope & Convulsions Due to a Hyperactive Carotid Sinus Reflex—Diagnosis and Treatment, *Arch. Int. Med.* 58:407, 1936.

18. McSwain, Barton, and Spencer, Frank C.: Carotid Body Tumor in Association with Carotid Sinus Syndrome, *Surgery* 22:222, 1947.

19. Downs, T. McKean: The Carotid Sinus as an Etiological Factor in Sudden Anesthetic Death, *Ann. Surg.* 99:974, 1934.

20. Rovenstine, E. A., and Cullen, Stuart C.: The Anesthetic Management of Patients with a Hyperactive Carotid Sinus Reflex, *Surgery*, 6:167 (Aug.) 1939.

21. Cattell, Richard B., and Welch, Mark: The Carotid Sinus Syndrome: Its Surgical Treatment, *Surgery* 22:59-67, 1947.

22. Pick, Joseph, and Wertheim, H.: A Technique for Blocking the Carotid Sinus Nerves, *Ann. Surg.* 127:144-149 (Jan.) 1948.

23. Stevenson, C. A., and Moreton, R. D.: A Subsequent Report on Roentgen Therapy in Carotid Sinus Syndrome, *Radiology* 50:207, (Feb.) 1948.

The Medical Association of Georgia
will hold its 1951 annual session at the
Bon Air Hotel, Augusta, April 17-20. Part-
ridge Inn will cooperate. Make your hotel
reservations now.

ROENTGEN THERAPY FOR BURSITIS OF THE SHOULDER

DAVID ROBINSON, M.D.
Savannah

An article written by Weinberg²⁶ states that Sokolow first attempted to use x-rays to treat joint pain in 1897. Later reports were more or less sketchy and the use of the roentgen ray was mentioned incidental to some other form of therapy. In 1929 Titus²³, stated that other workers had noted beneficial results in calcified bursitis of the shoulder when a simple x-ray exposure of the shoulder was made for diagnostic purposes.

The advent of deep x-ray apparatus, with its greater penetrability and skin tolerance, radically changed the use of the roentgen ray for the treatment of many benign conditions, including bursitis of the shoulder. Roentgen therapy has withstood the test of time and each year more favorable reports are confirming the work of earlier investigators. Many excellent articles have been written on this subject which include the work of Lattman¹², deLorimer⁸, Sandstrom²², Herrman¹⁰, Young²⁷, Young²⁸, Roxo Nobre and Araujo Cintra¹⁹, Pendegrass¹⁶, Borak⁴ and others. It would be difficult to elaborate on a subject so adequately covered.

Terminology

In reviewing the literature, one finds considerable variation in the terminology. The disease first described by Duplay in 1879 has the clinical features of the condition we know today as bursitis of the shoulder. For the sake of brevity I shall mention some of these synonyms and omit the nature of their derivation. Such terms include: periarticular calcification, para-articular calcification, subacromial or sub-

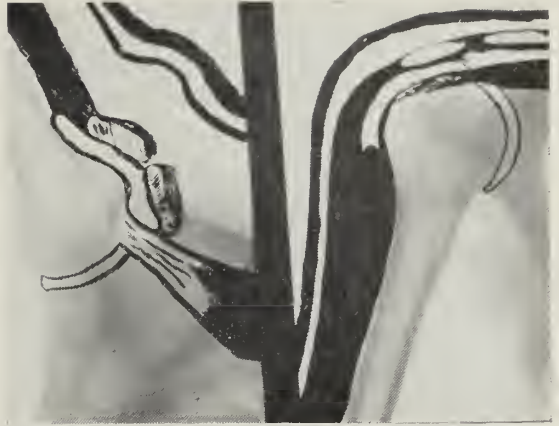


Fig. 1. Semi-diagrammatic demonstration of the relationship of bursa to the tendon of the supraspinatus muscle in abduction and adduction. When the subacromial bursa is inflamed so as to cause painful friction, the arm cannot be rotated or abducted.

deltoid calcification, humeroscapular or scapulohumeral periarthritis, para-arthritis, Duplay's disease, peritendinitis calcarea, calcification of the subacromial bursa, rheumatism, peritendinitis calcarea and a few others.

Anatomy

In 1906 Codman⁷ described in detail the anatomy of the shoulder and demonstrated that the subacromial and subdeltoid bursae were one and the same. It has been shown that there is only one bursa and the general trend of opinion is to call it "subacromial". The subacromial bursa is nearly as large as the palm of the hand of the individual in whom it is located and except for a small projection beneath the deltoid muscle, it lies between the acromial process and the head of the humerus. The bursa is composed of thin walls and contains little fluid. It is intimately in contact with the tendons of the short rotators of the shoulder, explaining the difference in the location of calcific deposits in these tendons.

The first illustration (fig. 1) is a semi-diagrammatic demonstration of the relationship of the bursa to the tendon of the supraspinatus muscle in abduction and adduction. When the subacromial bursa is inflamed so as to cause painful friction,

the arm cannot be rotated or abducted.

Etiology *

Many diversified opinions have been expressed concerning the etiology of this condition. Codman believed that strain and trauma produced small bloody deposits in the tendon with subsequent calcification. Others mentioned infection, endocrine disturbances, faulty metabolism, vitamin deficiencies and thermal changes. Sandstrom and Walgren²¹ following a thorough histopathologic study could find no evidence of trauma. They felt that the deposit was secondary to local tissue anemia and that improvement in symptoms and disappearance of the calcific deposits were due to an increased vascularity. Thus, explaining the response to x-ray therapy.

Incidence

Bursitis of the shoulder occurs most frequently in the middle-age group. Bosworth⁵ examined 6,061 normal individuals for shoulder involvement. He concluded that the condition was seen in the period of greatest activity in individuals whose occupations require abduction of the arm. Some writers disagree as to the side most frequently involved or the sex. This difference is so slight that it is not of much significance. Not a single article that I reviewed mentioned racial statistics. In my series I have seen only one case of calcific bursitis in a Negro. Statistically, my series of 61 cases agrees more or less with the results of other writers. (Table 1).

TABLE 1		
<i>Bursitis of the Shoulder</i>		
Total number of cases reported.....		61
Sex	Male	46%
	Female	54%
Average Age		47
	(ranging from 22 to 70)	
X-ray positive for calcium.....		44%
Extremity involved.....	Right.....	66%
	Left	34%
	Bilateral	5%
	Elbow	1 case
Duration of symptoms.....	4 months avg. (3 days to 2 yrs.)	

Symptomatology

For x-ray treatment purposes I prefer

to use a simple classification; namely, acute or chronic bursitis. This excludes such things as rupture of the supraspinatous tendon and acute traumatic bursitis.

The patient with acute bursitis usually presents a history of sudden pain in or around the shoulder girdle. This pain may radiate down the arm or to the neck. There may be tenderness on pressure over the greater tuberosity. Signs of inflammation may be present. It is almost impossible to rotate or abduct the arm. In the chronic condition the pain is duller in type and the patient may notice difficulty in raising the arm to right angles with the body. There may be a moderate degree of discomfort in the region of the biceps. In the chronic type of long duration, there may be some atrophy of the muscles of the shoulder due to disuse. The classification is more or less flexible and while it is also influenced by the duration of the symptoms, the latter is arbitrary.

Roentgen Diagnosis

A gross calcific deposit lateral to the greater tuberosity is one of the most positive diagnostic criteria for bursitis of the shoulder (fig 2). However, it is often difficult to demonstrate this calcification by ordinary views and special views of the shoulder in internal and external rotation are necessary to demonstrate this point (fig. 3). These views should be routine on all cases suspected of bursitis. Additional filtration may help at times. It is not necessary for calcific deposits to be present in order to make the diagnosis. Other roentgen changes include local areas of rarefaction, decalcification and trabecular atrophy. Neither the size of the calcific deposit, its presence nor its absence determines the severity of the symptoms. Many cases are positive for calcification and still may be symptom-free. Since the condition is often bilateral, a routine



Fig. 2. Calcific deposit lateral to the greater tuberosity.



Fig. 3. Views of the shoulder in internal and external rotation. These are necessary in most instances to demonstrate bursa.

examination of the opposite shoulder should be made on all proven cases. Calcific deposits may be present in joints other than the shoulder.

Included among my present series of cases is that of a 26-year-old white female who was successfully treated for bursitis of the shoulder by roentgen therapy. Four months later the patient hit her elbow on a hard object. This resulted in an intense pain in the elbow together with the usual signs of bursitis. X-ray examination showed calcification within the soft tissues of the elbow (fig. 4). The patient was again given a series of roentgen therapy and at present has been symptom-free for one year. This is similar to a case reported by Young²⁸ at the Mayo Clinic.

Differential Diagnosis

Other conditions in and about the shoulder should be ruled out both clinically and through the use of roentgenograms. According to Barford², arthritis of the shoulder is very rare, occurring in about five per cent of all cases with shoulder involvement. In evaluating a possible bursitis case, one must rule out fractures of the humerus, neoplastic changes, inflammatory changes, herpes zoster, calcinosis universalis, angina pectoris, neuralgia, brachial plexus syn-

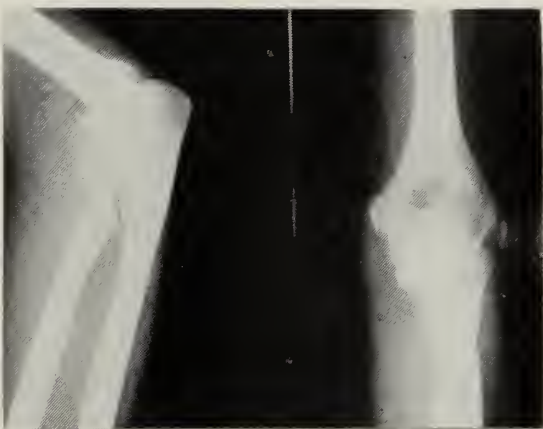


Fig. 4. Bursitis of the elbow. After therapy the patient was symptom-free after 1 year.

drome, cervical spondylitis, metastatic bone disease, tuberculosis and syphilis. Nathanson¹⁴ reported several cases in which an apical pulmonary tumor was associated with a calcifying bursitis.

Treatment

The treatment of bursitis of the shoulder is still controversial. Bosworth⁵ stated, "Bursitis of the shoulder is a self-limiting and curative disease. This fact makes it possible for the proponent of any particular form of therapy to claim cures". Many methods have been reported as successful, both medical and surgical. Among the medical methods are included the use of iron cacodylate by Richards¹⁷, vitamin A by Roxo Nobre and Araujo Cintra¹⁹, and the usual methods of physiotherapy by Titus²³, Feldman⁹, Martucci¹³, Troedsson²¹

and others. Chapman⁶ mentioned the use of large doses of ammonium chloride by Dick, Hunt and Ferry. However, Chapman felt that the usual methods of physiotherapy had almost everywhere proven unsatisfactory. This has resulted in the adoption of several types of surgical procedures, such as open operation and excision by Bartels³ and Howorth¹¹ and various methods of "needling" by Patterson and Patterson¹⁵ and Bosworth⁵.

In view of the favorable reports now available, deep roentgen therapy can be considered as one of the most successful forms of treatment for this condition. Many surgeons agree that conservative therapy should be given a trial prior to the utilization of any of the surgical procedures. Among those surgeons sharing this feeling are Rubert²⁰ and Rogers¹⁸. Table 2 was taken from Rubert's series showing that the results he obtained by conservative treatment were better than those obtained in operative cases. He reserved operations for cases due to complete tendon rupture (which did not fall in my classification) and for cases which did not respond to conservative methods.

TABLE 2: RUBERT
Treatment of Bursitis of the Shoulder

	No. Patients	Improved Or Not Improved
Results—nonoperative treatment	147	78%
Operative treatment	21	13%
Results with nonoperative group		
Cured	102	69%
Improvement	28	19%
No improvement	17	12%
Results with operative treatment		
Cured	10	48%
Improvement	5	24%
No improvement	6	28%

Allen¹ stated, "To secure happy results calls for close cooperation between the surgeon or physician and the radiologist, as this will only lead to the best results. In the hands of the skilled radiologist, this form of treatment is harmless to the patient and no untoward effects have occurred from its use."

All patients treated by me have been referred by other physicians and usually one or more of the previously mentioned forms of therapy have been tried and proven unsuccessful. Routine films are made on all cases prior to the institution of any treatment.

Table 3. presents treatment data. All cases are divided into the acute and chronic type, although there is no definite line of demarcation. In the acute stage I treat the patient 3 to 6 times every third day. If after the third treatment the patient shows complete relief, no further treatment is administered. If after the third treatment there is no response or incomplete relief, three more treatments are given at the same time interval.

In chronic cases the treatments are given at longer intervals. These may be either weekly or bi-weekly for four to six treatments. Where adhesions are suspected, three treatments may be given prior to a manipulation of the arm under anesthesia and three may be given afterwards.

TABLE 3 <i>Treatment Data for Bursitis</i>	
200 Kvp. 15MA, ½ Cu 1A1, 10 x 10 port, 50 Cms. TSD, HVL .9 Cu	
Number of treatments	3-6
Average dose per treatment	100-150 r/air
Area treated	anterior, lateral, posterior each
Interval between treatments	2-5 days average.

The results obtained in this series are seen in Table 4 which is self-explanatory. As noted by other workers, the best results were obtained in those cases treated in the acute stage. However, in chronic cases good results may be obtained after a long period of time. It is important that the roentgenologist and physician encourage the patient, reassuring him in order that he might not become impatient at the apparent failure to receive immediate relief. I have followed several of these cases by x-ray examinations six and twelve months after therapy and have seen a complete disappearance of the calcific deposits.

This, however, is not too significant since Codman and others state that the calcium will disappear if no treatments were given.

TABLE 4

Results from treatments of 61 Cases of Bursitis of Shoulder

No response at all.....	2 cases	3%
Poor to fair response.....	4 cases	7%
No response to survey.....	4 cases	7%
Total assumed and known poor response.....	10 cases	17%
Known satisfactory response.....	51 cases	83%
Reaction to x-ray (mild).....	2 cases	3%
Recurrence.....	1 case	2%

Summary

A brief review of the literature on bursitis of the shoulder is presented, including the diagnosis, etiology and the various types of treatment in use at present. A number of surgeons advocate conservative therapy prior to the adoption of a surgical procedure for this condition. The results obtained in a series of 61 cases confirm the work of other writers, demonstrating that 83 per cent of the average patients with bursitis of the shoulder will show a satisfactory response to deep roentgen therapy.

BIBLIOGRAPHY

- Allen, M. L.: X-ray Treatment of Infections, Surg., Gynec. & Obst. 67:393-399, 1938.
- Barford, L. J.: Subdeltoid Bursitis and a Few Other Conditions Causing Pain in the Shoulder, Rheumatism 3:12-14, 1946.
- Bartels, W. P.: The Surgical Treatment of Acute Subacromial Bursitis, J. Bone & Joint Surg., 22:120-121, 1940.
- Borak, J.: Tendogenic Disease and its Treatment With X-rays, New York State J. Med. 45:725-729, 1945.
- Bosworth, B. M.: Calcium Deposits in the Shoulder and Subacromial Bursitis: Survey of 12,122 Shoulders, J.A.M.A. 116:2477-2482, 1941.
- Chapman, J. F.: Subacromial Bursitis and Supraspinatous Tendinitis: Its Roentgen Treatment, California & West. Med. 56:248-251, 1942.
- Codman, E. A.: On Stiff and Painful Shoulders, Boston M. & S. J. 154:613-620, 1906.
- deLorimer, A. A.: Roentgen Therapy in Acute Parathritis, Am. J. Roentgenol. 38:178-195, 1937.
- Feldman, L.: Short Wave Diathermy in Subdeltoid Bursitis, Arch. Phys. Therapy 18:411-414, 1937.
- Herrman, W. G.: Value of Roentgen Therapy in Acute Subacromial Bursitis, J. M. Soc. New Jersey, 36:529-532, 1939.
- Howorth, M. B.: Calcification of the Tendon Cuff of the Shoulder, Surg., Gynec. & Obst. 80:337-345, 1945.
- Lattman, I.: Treatment of Subacromial Bursitis by Roentgen Irradiation, Am. J. Roentgenol. 36:55-60, 1936.
- Martucci, A. A.: Treatment of Painful Bursae of the Shoulder, Arch. Phys. Therapy Apical Tumefaction Stimulating Bursitis; Necessary for Routine Chest Examination in Patient with Shoulder Pain, New York State Med. J. 40:860-864, 1940.
- (Robinson, David: Roentgen Therapy for Bursitis of the Shoulder.)
- Patterson, R. L., Jr., and Patterson, R. H.: Further Observations in Treatment of Bursitis of the Shoulder, Am. J. Surg., 49:403-408, 1940.
- Pendegrass, E. P., and Hodes, P. J.: Roentgen Irradiation in the Treatment of Inflammations, Am. J. Roentgenol. 45:74-106, 1941.
- Richards, T. K.: A New Treatment for Bursitis, New England J. Med., 205:812-813, 1931.
- Rogers, M. H.: Treatment of Subdeltoid Bursitis, Am. J. Surg. 43:292-297, 1939.

- Roxo Nobre, M. O., and de Araujo Cintra, R. R.: Radiotherapy in Duplay's Disease, Am. J. Roentgenol. 52:415-422, 1944.
- Rubert, S. R.: Subacromial Bursitis, Arch. Surg. 37:619-641, 1938.
- Sandstrom, C., and Wahlgren, F.: Beitrag Zur Kenntnis der "Peritenditis calcarea" (Sogen "Bursitis Calculosa") speziell vom pathologisch-histologischen Gesichtspunkt. Acta radiol. 18:263-296, 1937.
- Sandstrom, C.: Peritenditis Calcarea, Am. J. Roentgenol. 40:1-21, 1938.
- Titus, N. E.: Electrical Treatment of Subdeltoid Bursitis, Am. J. Surg. 6:318-321, 1929.
- Troedsson, B. S.: Diathermy in Calcium Deposits Around the Subacromial Bursa and Supraspinatous Tendon, Arch. Phys. Therapy 19:166-172, 1938.
- Villaca, J.; Falcí, A., and Ribeiro, J. D.: Contribuicao a Terepeutica dos Depositos Calcareaos Sub-deltodanos Pela Vitamina A. Hospital, Rio de Janeiro, 30:937-950, 1946.
- Weinberg, T. B.: Arthritis and Para-arthritis Treated with the Roentgen Ray, Am. J. Roentgenol. 43:416-424, 1940.
- Young, B. R.: Roentgen Treatment of Bursitis of the Shoulder, Am. J. Roentgenol. 56:626-630, 1946.
- Young, H. H.: Calcified Bursitis, Proc. Staff Meet., Mayo Clin. 19:250-253, 1944.

DIAGNOSTIC AND THERAPEUTIC
BLOCK FOR THE TREATMENT
OF PAIN

C. MacKENZIE BROWN, M.D.

Albany

Every day most of us are faced with a common problem: What is the best way to relieve this patient's pain? Often it is not done easily; sometimes not satisfactorily.

Like most long-term developments, the progress in the control of pain has been accomplished through a great amount of hard work and physiologic analyses upon the part of many investigators.

It is my purpose to bring to your attention some of the conditions which may be satisfactorily diagnosed or treated by nerve block procedures. The list is so long that some conditions must be omitted and those mentioned must be described briefly.

The crux of successful nerve block is accurate diagnosis. This latter fundamental fact cannot be emphasized too strongly. Very essential is a working knowledge of the anatomy of the part, of the use of proper solutions and adequate experience in the various technics.

Read before the Medical Association of Georgia in annual session, Savannah, May 13, 1949.

Some headaches are amenable to nerve block therapy: Post-traumatic occipital headaches may be relieved by blocking the second and third cervical somatic nerves paravertebrally¹. Tender areas may be injected for fibromyositis. An attack of migraine may be aborted if the involved nerve is blocked early.

Often the etiologic factor of face pain is obscure and if there is a causative factor present that is overlooked, this pain will not usually be helped by block. Tic douloureux may be relieved by blocking the trigeminal nerve or its involved branches. Face pain may have its origin in the occiput or upper cervical vertebrae; cervical somatic nerve block helps some of these. Stellate ganglion block may be of value in relieving some cases of atypical face pain².

Four months ago a case of trismus of five days' duration, probably caused by a reflex from the temporomandibular joint, was completely relieved by a single block of the mandibular nerve with 3 cc. of procaine.

For torticollis, block of the second and third cervical somatic nerves and the spinal accessory may be indicated. Laryngotuberculosis may be associated with such marked pain on swallowing that inanition develops. In such a case, block of the superior laryngeal nerve may be a life-saving procedure³. Persistent hiccoughs refractory to the usual methods of treatment may be relieved by blocking the roots of the involved phrenic nerve (third, fourth and fifth cervical).

Shoulder pain requires a good examination. Bursitis and "frozen shoulder" are usually benefited by blocking the supra-scapular nerve or brachial plexus⁴. This simple effective therapeutic block is not used with the frequency that it merits. Myalgias and postcoronary pain in the shoulder may be helped by infiltrating the

tender areas with procaine.

Herpes zoster, usually a virus disease attacking the sensory nerve ganglia, involves the cervical and thoracic nerves most commonly. Paravertebral blocking of the nerves which supply the painful segments may produce excellent results, particularly in the acute cases.

In blocking nerves for herpes zoster, sciatica or any other pain syndrome which might be indicative of chronic nervous system disease, every effort should be made to obtain an accurate diagnosis first, but sometimes it becomes necessary to give symptomatic relief during the investigation.

Fortunately, in spite of the fact that many pathologic disorders may produce sciatica, a large number of these cases are not due to serious organic disease. In many cases of sciatica, after investigation, it has been found of value not only to block the sciatic nerve, but also to perform a caudal block; sometimes the roots of the sciatic nerve as well. This combined practice is effective therapy. Thus far we have considered somatic nerves for the most part.

Autonomic nerve fibers make up part of the mechanism of many disease entities⁵. Pain usually rouses up increased sympathetic activity. This results in vasoconstriction. Regardless of the part of the body in which vasoconstriction occurs, whether it is in a blood vessel to the brain or in a blood vessel to the lower limb, the fibers responsible have their origin from that part of the spinal cord between the first thoracic and the third lumbar⁶.

It is well established that vasoconstriction due to sympathetic activity may be changed to vasodilation by procaine block of the sympathetic fibers involved⁷. Sympathetic fibers may be anesthetized by sub-arachnoid block, by an epidural block, by a ganglion block, or by a somatic nerve block. By means of the latter method, post-

ganglionic fibers may be anesthetized. Sympathetic fibers to the lower limb are sent by way of L 1, 2, 3 sympathetic ganglia⁶.

Extremities exhibiting vascular spasm and edema, with any stage of phlebitis, may have dramatic improvement by means of sympathetic block⁸. Vascular spasms from trauma, arterial embolism, exposure to cold, and other causes, may be effectively treated by this means⁹.

Pain and edema of the extremities associated with a fractured bone may be effectively treated by sympathetic block¹⁰. Post-traumatic dystrophy, osteoporosa atrophy of bones and phantom limb pain may be greatly benefited by repeated sympathetic blocks.

For the diagnosis and surgical evaluation of peripheral vascular disease, sympathetic block may be used¹¹. Diagnostic block may also be performed in Hirschsprung's disease.

Sympathetic fibers to the upper extremity may be readily blocked by infiltrating the stellate ganglion. This procedure is widely used in causalgic states of the upper extremity, sometimes in the shoulder-hand syndrome associated with coronary disease¹², in pulmonary embolism¹³, and in cerebral embolism and thrombosis¹⁴.

Reflex anuria has been relieved by spinal anesthesia, by epidural block and by paravertebral block (T11, T12, L1, L2)¹⁵.

Pain from the heart can be relieved by blocking the first to the fifth thoracic sympathetic ganglia. Alcohol blocks should be reserved for the poor risk, emotionally stable patients with pain so severe that it prevents ordinary activity and which is not controlled by ordinary medical management.

Some of the arthritides may be helped by nerve blocks. Sympathetic blocks for rheumatoid arthritis in a non-inflammatory stage are useful. Where osteoarthritis

causes pressure on intervertebral nerves, somatic nerve block may produce relief. One injects the trigger points in cases of fibrositis.

One of the biggest problems in medicine is the treatment of malignancy. Intractable pain in this condition is difficult to manage^{16 17}. When the origin of pain is from a viscus, alcohol block of the sympathetic pathways should be tried. For painful metastases, somatic nerve block should be performed; the pain of metastases is more easily relieved.

Intraspinal alcohol is of definite use in these cases and in some other debilitating painful syndromes¹⁸. By adjusting the position of the patient, the alcohol can be directed to the desired areas of the posterior roots in an effort to destroy the sensory fibers. Nerve block for the pain of malignancy should be used to a greater extent, with more relief for the patient and with less need for narcotics.

Again I wish to re-emphasize the need for accurate diagnosis, the use of procaine and the use of procaine early. It is necessary to ascertain not only where pain originates, but also the underlying pathological process.

After much training doctors of medicine are equipped to diagnose and to treat disease. For the purpose of combatting pain, we are becoming more effective by using our available ammunition from our storehouse of knowledge and experience.

REFERENCES

1. Judovich, B., and Bates, W.: Pain Syndromes, Philadelphia, F. A. Davis Company, 1949, p. 256.
2. Judovich, B., and Bates, W.: Pain Syndromes, Philadelphia, F. A. Davis Company, 1949, p. 259.
3. Pitkin, G. P.: Conduction Anesthesia, Philadelphia, J. B. Lippincott Company, 1946, p. 874.
4. Milowsky, J., and Rovenstine, E. A.: Suprascapular Nerve Block: Evaluation In The Therapy of Shoulder Pain: *Anesthesiology* 10:76-81 (Jan.) 1949.
5. Livingstone, W. K.: Pain Mechanisms, New York, Macmillan Company, 1947, p. 209.
6. Best, C. H., and Taylor, N. B.: Physiological Basis of Medical Practice, Baltimore, Williams & Wilkins Company, 1945, p. 937.
7. Nash, J.: Surgical Physiology, Springfield, Charles C. Thomas Company, 1947, p. 403.
8. Ochsner, A.: Indications and Technic For Interruption of Impulses Transversing the Lower Sympathetic Ganglia, *S. Clin. North America* 23:1318 (Oct.) 1943.
9. Mandl, F.: Paravertebral Block, New York, Grune and Stratton, 1947, p. 196.

(Continued on page 219)

THE JOURNALOF THE
MEDICAL ASSOCIATION OF GEORGIAEDGAR D. SHANKS, M.D., Editor
478 Peachtree Street, N. E., Atlanta, Ga.

MAY, 1950

MACON SESSION, 1950

The Macon session of the Association of 1950—also known as the 100th annual session—showed again that Georgia physicians are not only eager to meet and enjoy good fellowship, but are at all times willing to do those things which develop improvement in their knowledge both of medicine and public affairs.

In addition to the scientific program, highlights of this session were: continued serious discussion of compulsory health insurance, further development of non-profit prepayment medical care plans and nonprofit hospital insurance coverage, and improved health education for the public. All told, the session was most profitable to those persons who attended it. Distinguished guest speakers included the president of the American Medical Association, Dr. Ernest Irons of Chicago, whose subject was "Medicine and American Freedom."

Other distinguished guest speakers were: Dr. Thomas M. Rivers of New York City, whose subject for the Calhoun Lecture was "Reaction and Relation of Host Cells of Viruses." Dr. Rivers, a native Georgian, calls Jonesboro home. Dr. Jacob E. Finesinger of Baltimore spoke on "Handling the Emotional Problems of the Cancer Patient", and Dr. Richard L. Meiling of Washington, D. C. gave a paper concerning the "Medical Services in the Department of Defense." All these papers will be published in *The Journal*.

Scientific and Technical exhibits were excellent in every respect and proved again

their educational value.

Registration for the session was as follows:

REGISTRATION			
	Members	Visiting Physicians	Exhibitors Scientific Technical
April 18	135	11	
April 19	253	65	
April 20	143	20	11 94
April 21	6	3	
Total physicians registered	626		
Total exhibitors	105		
		731	
Woman's Auxiliary		186	
Grand total April 21, 1950		917	

**NEW OFFICERS OF THE ASSOCIATION
AND DELEGATES TO THE A.M.A.**

At the Macon session of the Association, concluded April 21, Dr. A. M. Phillips, Macon, was duly installed president of the Association; Dr. W. F. Reavis, Waycross, was elected president-elect; Dr. Leon Porch, Macon, was elected first vice-president; Dr. Thos. A. Peterson, Savannah, was elected second vice-president. Continued in their respective positions were: Dr. J. W. Simmons, Brunswick, parliamentarian, and Dr. Edgar D. Shanks, Sr., Atlanta, secretary-treasurer, and editor of *The Journal*.

Other officers elected follow: Dr. Marion C. Pruitt, Atlanta, councilor for the Fifth District; Dr. H. D. Allen, Jr., Milledgeville, councilor for the Sixth District; Dr. D. Lloyd Wood, Dalton, councilor for the Seventh District, and Dr. Sage Harper, Douglas, councilor for the Eighth District.

Dr. W. G. Elliott, Cuthbert, was chosen chairman of Council.

Dr. B. H. Minchew, Waycross, was re-elected delegate to the A. M. A., and Dr. E. A. Allen, Atlanta, was elected delegate to the A. M. A. to succeed Dr. Allen H. Bunce, Atlanta, who did not offer for re-election to this position.

The next session of the Medical Association of Georgia will be held in Augusta, April 17-20, 1951. The Bon Air Hotel will be headquarters, with the Partridge Inn participating.

WILLIAM FARRELL REAVIS, M. D.

At the closing meeting of the 100th annual session of the Medical Association of Georgia, it was announced that Dr. William Farrell Reavis, of Waycross, had been unanimously elected President-Elect of the Association. Dr. Reavis will be inducted into office as President next year.

Dr. Reavis was born May 3, 1889, in Cherokee County, Alabama, the son of William Posey and Lora Ann (Crayton) Reavis, both of Georgian birth and both now deceased. His father, who lived in Milton County, Georgia, was a farmer. His mother came from Floyd County, Georgia. He had four sisters, three of whom are living.

Public schools provided the early education of William Farrell Reavis, who afterward was a student at Georgia State Normal College, in Athens. In 1911 he was awarded the degree of Doctor of Medicine at Emory University, in Atlanta, and at once began the active practice of his profession in Waycross. Until 1925 he was engaged in general medical work, but in that year he shifted his efforts to his present specialty of urology. In this specialized realm of medicine he has done his major work, serving in many useful capacities in Waycross and vicinity. He is attending urologist on the staffs both of Ware County Hospital and Atlantic Coast Line Hospital.

Reports of Dr. Reavis' work have appeared in the form of articles and monographs in different medical journals. He is a past president of the Ware County Medical Society, Eighth District Medical Society, and Georgia Urological Society. He was a charter member of the Southeastern Branch of the American Urological Society, a delegate to the Medical Association of Georgia for thirty years, and counselor of the Medical Association of Georgia for several years. Dr. Reavis is a fellow of



WILLIAM FARRELL REAVIS, M.D.

the American Medical Association, and a member of Phi Chi medical fraternity.

Dr. Reavis interested himself extensively in the civic and social life of Waycross and surrounding community. He has been a consistent Democrat, and belongs to the Free and Accepted Masons, the Benevolent and Protective Order of Elks, and the Woodmen of the World. He was the first president of the Rotary Club of Waycross. He is a Methodist in his religious faith. He enjoys fishing, hunting and playing golf.

On April 4, 1912, Dr. Reavis married Olive Gladys Parker of Ware County, Georgia. The children of this marriage are: Mrs. J. Frank Pugh, Atlanta, Ga.; Mrs. Sid Willingham, Rome, Ga.; Dr. William Farrell Reavis, Jr., a retired veteran, Augusta, Ga.; Mrs. Ed Roe Stamps, Waycross, Ga., and Mrs. M. A. Cooper, Jr., Trion, Ga. One son, Jack, died in infancy.

Dr. Reavis' long experience in the affairs of organized medicine, particularly as a member of the Council of this Association, qualifies him to meet squarely and solve some of the intricate socio-economic problems which confront the medical profession of today. Let each member resolve to cooperate with him and make his task easier.

AWARDS, 1950

It was a happy occasion at the annual banquet of the Medical Association of Georgia, held at Idle Hour Country Club, Macon, April 20. Not only did the members and their wives enjoy good fellowship, but the food and other refreshments, and entertainment, were good. Added to all of this was the report of the Committee on Awards. They had selected for two awards the names of two distinguished Georgia physicians. Dr. Cleveland Thompson, of Millen, was awarded the Hardman Loving Cup, and Dr. Claude A. Smith, of Stockbridge, was awarded the Ware County Medical Society Hookworm Cup.

Other awards were made by another committee of the Association, these being for scientific and educational exhibits. At the moment—as this *Journal* goes to press—all the facts concerning the awards are not at hand, therefore detailed information regarding all awards will appear in a later number of *The Journal*.

SYNTHESIS OF ACTIVE PORTION OF ACTH SEEN AS POSSIBLE

Recent research should make possible the eventual synthesis of an "active fragment" of ACTH which produces relief from symptoms of rheumatoid arthritis, according to an editorial in the April 29 *Journal of the American Medical Association*.

Synthesis of ACTH in the laboratory has been considered to be of insurmountable difficulty, owing to the weight of the molecule and the fact that it is protein in nature.

The editorial refers to the work of Choh Hao Li of the Institute of Experimental Biology, University of California, Berkeley, and Norman

G. Brink, Melvin A. P. Meisinger and Karl Folkers of the Research Laboratories of Merck & Co., Inc., Rahway, N. J.

Dr. Li obtained fragments of the hormone which retained biologic activity. The three Rahway research chemists recently reported a component or components of ACTH derived from the hormone compound by a laboratory process (peptic digestion), according to the editorial. This substance kept rheumatoid arthritis in remission in two patients previously treated with ACTH and was "clinically active" in a third patient.

"The effect was equivalent to the intact ACTH," the editorial says, adding:

"With the activity of ACTH being confined to a relatively small molecular weight compound, it should be possible eventually to synthesize this active fragment in the laboratory. This, in turn, would free the amount of the drug which could be produced from the number of pituitary glands available."

In further processing of the fragmentary product, the Rahway chemists found it to contain at least seven common amino acids, compounds which serve as building blocks for the body.

"The revelation that the active fragment is composed of a chain of approximately seven amino acids makes commercially feasible synthesis from other than glandular sources a possibility," Dr. Paul L. Wermer, Chicago, assistant to the secretary of the A.M.A.'s Council of Pharmacy and Chemistry, said.

"Although this synthesis may prove extremely difficult, the discovery of this product constitutes an important basic step toward assuring a more adequate supply of material having ACTH activity," he added.

The natural supply of ACTH from pituitary glands of hogs definitely is limited by the source, and as the situation now stands, could never approach the demand.

Armour & Co. estimated that some 70,000,000 hogs will be processed commercially between November 1, 1949 and November 1, 1950. If every pituitary could be saved, which is impossible, and if one milligram of ACTH, which is high, could be extracted from each gland, there would be obtained a theoretical amount which would give only one dose each per year to less than half the persons with arthritis in the nation.

At present, the supply of ACTH still is inadequate to meet all the research requirements of groups desiring to study the hormone.

FEDERAL INCOME TAX LAWS UNFAIR TO PROFESSIONS, SAYS ECONOMIST

Present federal income tax laws discriminate against physicians and other professional men and women, Frank G. Dickinson, Ph.D., Chicago,

economist and statistician of the American Medical Association, points out.

Because a considerable portion of physicians' lifetime earnings are "bunched" into a relatively few peak earning years, they pay more income taxes than other persons who receive the same lifetime incomes spread more evenly over a greater number of years. Dr. Dickinson says in an article in the April 29 *Journal of the American Medical Association*.

This discrimination in lesser degree applies to a number of other professions, according to the article.

"A physician undergoes a long training period (the longest among the professions) during which he foregoes income and incurs expenses accumulating to approximately \$35,000 at the time of entering medical practice, at approximately age 28," Dr. Dickinson says. "The working lifetime remaining after this prolonged training period is shortened.

"To pay off this investment in training in annual installments, his annual gross earnings would have to be at least \$5,000 more than those of a person whose earning period started at age 18.

"Under the 1942 Federal Internal Revenue Code, funds used by companies for the purpose of providing employees with pensions or shares in profit-sharing trusts are deductible from gross receipts as business expenses and thus are not a taxable part of the employer's or company's income, if the particular plan is approved by the Bureau of Internal Revenue.

"Since the provisions are restricted to employees, professional men who can qualify as employees—for example, company lawyers and company physicians—can receive the benefits of these pensions and profit-sharing trusts, while those who conduct their professions as single proprietorships or partnerships may not qualify for these benefits.

"The Board of Trustees of the American Medical Association authorized its representatives to record, at a meeting of the Association of the Bar of the City of New York, its support, in principle, of the proposal that the Internal Revenue Code be amended to permit physicians who practice as individual proprietors or partners to declare as business expenses the costs of pension programs for themselves, with the proviso that there should be a reasonable maximum pension.

"The American Medical Association believes that such an amendment would appreciably reduce the present discrimination."

The Medical Association of Georgia will hold its 1951 annual session in Augusta. The dates are April 17, 18, 19 and 20. Bon Air Hotel will be headquarters.

BEWARE OF TICKS THIS SPRING. AMERICAN MEDICAL ASSOCIATION SAYS

From now throughout the summer, ticks in certain areas of the United States will carry Rocky Mountain spotted fever, says an editorial in the April 15 *Journal of the American Medical Association*.

The mortality of the disease throughout the nation average 23 per cent in 4,033 cases reported during the period 1939-1946, the editorial points out. Fortunately, two of the newer antibiotics, aureomycin and chloromycetin, give promise of being effective in treatment of Rocky Mountain spotted fever.

The important foci of the infection are Wyoming, Montana, Colorado, Virginia, Maryland and North Carolina, according to the editorial. In the West, the majority of cases appear between April and June, and in the East, during July and August. Throughout the nation, more cases occur during July than in any other month.

Many cases occur in persons seeking recreation and on vacation in rural or suburban areas, the editorial says. Rocky Mountain spotted fever is characterized by a high fever, muscle pains and a red, spotted rash. Protection against infection lies in preventing the attachment of a tick to the skin. High boots, leggings or socks worn outside the trousers hinder the tick from attaching itself to the leg. If there are no openings, in the clothing, however, the tick will crawl up and attach itself on the neck.

In tick-infested country one should pass the hand frequently over the back of the neck and behind the ears to remove ticks that may not yet be attached to the skin. After becoming attached, ticks seldom transfer the infection until they have fed on the victim for several hours. Therefore, inspection of the body and clothing twice daily when in tick-infested country usually is sufficient.

A tick attached to the skin should be removed immediately and as gently as possible. If the tick is pulled off with the fingers, it should be handled with a small piece of paper and the abrasion should be touched gently with a disinfectant such as iodine or gently washed with soap and water.

Vaccines have definite protective value for a period of less than a year, the editorial says. Tourists who go to areas where the infection is present and persons who live in areas where the infection highly virulent should be vaccinated.

NEW EYE INSTRUMENT MAY HELP PREVENT BLINDNESS

A new instrument which measures pressure within the eye may result in the prevention of much unnecessary blindness. Development of the instrument, called a tonometer, is reported in the April 29 *Journal of the American Medical Association* by a New York doctor and a research worker.

Dr. Conrad Berens and Charles P. Tolman, B.S., also of New York, point out that the instrument is for "screening" large numbers of persons rather than for diagnosing specific diseases.

The instrument was developed from the basic design of an older instrument used for diagnosing eye conditions. Intraocular pressure is measured when the instrument is applied to the eye. The working parts are mounted in a plastic holder. The instrument is slightly less than three inches long and three-fourths an inch in diameter.

"We believe that this instrument, placed in the hands of general practitioners, may prevent blindness through earlier discovery of hypertension within the eye and earlier reference of the patient to an ophthalmologist," the authors say.

Increase of pressure within the eye is an early symptom of glaucoma, a principal cause of blindness, and other eye diseases.

GEORGIA DEPARTMENT OF PUBLIC HEALTH

THE TWO-FOLD PROBLEM OF PREMATURE BIRTHS

HELEN W. BELLHOUSE, M.D.
Atlanta

The problems of premature birth are two-fold. On the one hand lies prevention of occurrence; on the other, care of the infant itself. In the past proportionately more attention has been paid to the care of the premature infants than to the preventive aspects of prematurity.

Until 1947 the death rate was the only local or national vital statistical material available on prematurity. As a result of efforts to obtain special reporting on births of infants 5½ pounds and under, a more complete picture is now becoming available. Too, until 1948, when Bain and Hubbard¹ reported figures developed from the study of the American Academy of Pediatrics, a 5 to 10 per cent premature birth incidence figure has been loosely employed, due to lack of better information, with little or no allowance made for variations by locale or race. Bain and Hubbard, studying the records of 22 hospitals which reported both births and deaths, by race, and by weight groups, established an expectancy of 5.6 per cent for the white race and 9.5 per cent for the non-white. If more of the 323 hospitals had kept records of both births and deaths—by weight and race—the group of infants reported would have been larger, and would have afforded more valid information. Bain and Hubbard noted this limitation.

Prevention is obviously the responsibility of obstetricians, general practitioners, and their patients. The care of the "unfinished" baby has long been shared by the general practitioner and the pediatrician. The health department has figured as the third party. It is interested both in assisting in developing the program for the prevention of early arrival, and in aiding the program for increasing the survival of these infants of 5½ pounds and under. But, until a picture is factually developed for each community, local needs cannot be evaluated for a constructive program, since the problems of premature births vary in each community, not only as to arrival and survival rate but as to race and socio-economic level.

To illustrate, we can use the figures on premature births and deaths, by race, reported for 1947 and 1948, in five large population centers in Georgia. All of these counties have health departments and a sizable urban population. These five relatively statistically reliable areas, reported premature births, by percentage of live births, ranging from 5.1 to 9.3 per cent for whites; and from 7.5 to 18.8 per cent non-

white. Using the same figures, the reported mortality percentage of premature live births ranged from 3 to 40 per cent. The area with the highest premature birth incidence is reported as next to the lowest in premature mortality. On the other hand, the area with the smallest reported percentage of premature live births reported the highest death rate. Not unexpectedly, the non-white premature birth incidence exceeded the white, with one exception. In two of the counties, the reported white mortality for both years was higher than for the non-white. In two other counties the white premature mortality exceeded the non-white in one year or the other.

In some of Georgia's other large counties there seems to be a need for stimulating interest and awareness of physicians, midwives, neighbors, registrars, and public health personnel, in local premature birth problems. Some remarkably low premature birth rates are reported, usually for the non-white group. Case finding on the part of everyone concerned will undoubtedly bring these figures more in line with those accepted, and give a truer picture.

In other large counties, meticulous reporting shows a higher than expected incidence of premature births among white or non-white, or both groups.

Dr. Ethel Dunham's handbook for physicians, "Premature Infants"², covers all phases of the problem—prenatal and intrapartal, as well as neonatal, and is useful resource material.

Good prenatal care includes individual counseling and advice at each visit as well as early periodic visits, thorough physical examination and clinical study. And while it is difficult to evaluate the specific contributions toward prevention of premature births made by a diet high in protein, and a healthy emotional status, recent studies suggest time given to this type of education may be considered well spent.

Georgia physicians can make many and varied contributions, individually and as a group. Complete reporting of premature or immature births and deaths, by weight and by race, will give a more accurate picture for community program planning. The two-fold premature birth problems should be valued cooperatively. General practitioners, obstetricians, pediatricians, and public health physicians, working together, can make great strides toward reducing the incidence of unnecessary premature births and premature infant morbidity and mortality.

There is a very critical period during the first 24 hours of a premature's life when the responsibility of the physician who has given prenatal care and done the delivery, and the physician who is to care for the baby subse-

quently, overlaps. Fifty-seven per cent of the deaths of prematures occur in that period. This area, being of common interest to obstetric, pediatric, and public health groups, should be a good place to start cooperative study and work.

Physicians, as leaders in community planning for health needs, can study individually, by special interest groups, and in medical societies, the information tabulated by the health department from physicians' individual reports. Obstetricians and general practitioners will find that in some areas it is the "private practice" class that needs more help and education in the prenatal period. In other communities there will obviously be a need for more adequate provision for the indigent and near-indigent group, be it white or non-white.

The campaign toward improved prenatal care and prevention of premature birth should, whenever possible, be carried on in the office of the obstetrician or general practitioner. Unfortunately, not every expectant mother in Georgia can, or will, see the private physician in his office. Those facilities and personnel for good prenatal care available in the doctor's office can be supplemented by maternal conferences, strategically located, under the auspices of local health departments. Attention to provisions for good prenatal care, easily available to both races, and to all socio-economic classes, should materially reduce the maternal morbidity and mortality rates, as a whole.

Specifically, 6,219 premature births have been reported in Georgia for 1949. Georgia ranks poorly, next to the bottom, in the most recent national maternal mortality rating for the white race. It ranks 8th from the bottom in the non-white maternal mortality rate, although the rate itself is almost three times as great as that of the white race. There are areas in Georgia notably low and notably high in reported premature births. All of these problems deserve study. Every resource should be explored and developed.

Educational information should be made more available on "quality" prenatal and intrapartur care. The favorable influence of such factors as early medical care, and counseling to promote good nutritional habits and good emotional hygiene, should be stressed. In the intrapartur period, the benefits derived by the premature infant from a high oxygen intake for the mother; little or no analgesia or anesthetic; and routine episiotomy to protect the more delicate head structures from damage; should receive more study.

In Georgia, cooperation between physician and health department has made possible more effective contributions toward improving care of premature infants. This same cooperative effort can be just as effective in developing programs which will improve care of all expectant

mothers, reduce premature birth incidence, morbidity, and mortality, and favorably influence the entire maternal welfare picture.

REFERENCES

1. Bain, Katherine; Hubbard, John P., and Pennell, Maryland U.; Hospital. Fatality Rates for Premature Infants, *Pediatrics* 4:54 (Oct.) 1949.
2. Dunham, Ethel C.; Premature Infants, a Manual for Physicians: Children's Bureau Publication no. 325, 1948.

NEWS ITEMS

Dr. Henry T. Adkins, Waycross physician, and regional health official, was recently named commissioner of the Ware County Department of Public Health. Dr. Adkins was elected to fill the vacancy in the Waycross office caused by the death of Dr. W. C. Hafford, acting commissioner of health. Dr. Hafford had served Ware County for several months following the death of Dr. George E. Atwood, commissioner of health. Dr. Adkins is well qualified to head Ware County's health program, for he had previously served as commissioner of public health in Sumter and Bleckley counties where he made outstanding progress in public health. He received his field training in public health work with Dr. M. E. Winchester of the Glynn County Health Department in Brunswick. He also completed a course in public health at the University of North Carolina.

* * *

The Albany and Dougherty County Board of Health, Albany, recently announced through Dr. David M. Wolfe, health commissioner, in his annual report to the City-County Board of Health, that despite "considerable progress" recorded in controlling the disease, tuberculosis remains the number one health problem. The progress referred to, the report states, is that derived from obtaining skin tests, x-ray clinics and field visits, a true picture of the disease as it affects the people of the city and county. There were nine deaths from tuberculosis in Albany and Dougherty County in 1949. During the year, 2,431 x-rays were made; 404 of them being rechecks. There were 676 admissions to service; and of this number, 69 were positive (18 new cases); 151 were suspicious cases and 262 were contacts, the report revealed. Dr. Wolfe's comprehensive report also stated that control of venereal diseases continues to be a major health activity, despite new "miracle" drugs and development of rapid treatment for syphilis.

* * *

Athens Medical Center construction was recently begun on the northwest corner of Prince Avenue and Chase Street, Athens. Owners of the new building will be Medical Center of Athens, Inc., of which Dr. John A. Simpson is president. Corporation members are Drs. Simpson, J. B. Neighbors, Jr., Goodloe Y. Erwin, John Stegeman, H. G. Byrd, M. A. Hubert, Herschel Harris, Tom Dover, James A. Green, Sam Talmadge, John McPherson, Jr., and dentists James B. Allen, Charles F. Elder, Paul Keller, and Edwards Prescription Laboratory. The building will be of brick construction, one story in height, will be 15,000 square feet in area and have complete air conditioning facilities.

* * *

The Atlanta Radiological Society elected the following officers at the March meeting: Dr. William W. Bryan, president; Dr. George Hrdlicka, vice-president, and Dr. Ted F. Leigh, secretary-treasurer.

* * *

The Atlantic Coast Line Railroad Surgeons Association held its forty-sixth annual meeting in Tampa, Fla., March 30 and 31. Dr. Ben Hill Clifton, Atlanta, president of the association, presided. Dr. J. Elliott Scarborough, Atlanta gynecologist, was among the guest speakers. He discussed "Present Status of Hormone Therapy in Treatment of Malignancies." Dr. Braswell E. Collins, Waycross, secretary-treasurer of the Atlantic Coast Line Railroad Surgeons Association, also took

(Continued on Page 220)

WOMAN'S AUXILIARY TO THE MEDICAL ASSOCIATION OF GEORGIA

Highlights of the 1950 Convention

The Bibb County Auxiliary of Macon entertained the State Auxiliary April 18-21. Our hostesses left nothing undone for our pleasure and entertainment.

Mrs. Milford Hatcher as president and Mrs. A. M. Phillips as general chairman are to be congratulated on the success of the meeting.

There was a total registration of 186.

The first session held Wednesday, April 19, was opened with invocation by the Rev. Tracy Lamar, Rector St. James Episcopal Church.

The Pledge of Loyalty was read by Mrs. Sam Anderson, Atlanta.

Mrs. Milford B. Hatcher, president of the Bibb County Auxiliary, welcomed the members. Mrs. W. H. Benson of Marietta, responded.

Mrs. J. Lon King, of Macon, introduced officers and guests.

Mrs. J. Harry Rogers, presided, and gave a splendid account of her year as president. She fulfilled her pledge to "Fight With Knowledge" and carried the message against socialized medicine to every auxiliary under her jurisdiction. We know that auxiliary members are certainly better informed and better prepared to carry on a crusade against political medicine than ever before.

Mrs. Bruce Schaefer, chairman of Legislation for the Auxiliary to the A.M.A., gave an excellent talk on the danger confronting American freedom and urged our renewed interest and efforts.

The Auxiliary was honored by the presence of Mrs. David B. Allman, Atlantic City, president of the Auxiliary to the American Medical Association. She praised the members for the work done and recognition they have gained during the past year. She believes every doctor's wife should be an auxiliary member and do her part in good public relations for the profession.

Dr. Enoch Callaway, president of the Medical Association of Georgia, spoke on "Our Present Situation," which inspired us to continue our crusade against political medicine.

District and county officers gave excellent reports.

Mrs. Allen H. Bunce gave an interesting report of the convention of the Woman's Auxiliary to the A.M.A. last year in June.

Mrs. Ernest R. Harris, of Winder, conducted the memorial service for the following members who died during the year:

Mrs. E. D. Peacock, Sandersville.

Mrs. George F. Hagood, Sr., Marietta.

Mrs. Willis P. Jordan, Sr., Columbus.

The second session on Thursday was opened with prayer by Dr. Wm. E. Denham, pastor, First Baptist Church.

Pledge of Loyalty was led by Mrs. W. G. Elliott, Cuthbert.

Mrs. Wm. K. Jordan, president-elect of Bibb County Auxiliary, welcomed the guests. Mrs. Robert E. Jones of Tifton responded.

Dr. A. M. Phillips, president-elect of the Association, made a short talk asking the Auxiliary to continue its splendid work and pledged his support to the Auxiliary.

Dr. Murdock Equen, chairman of the Advisory Committee, made a short report. He reminded the members of the power and influence of women, stating that 80 per cent of the property in our country is owned by women, therefore her influence for or against any issue is vital.

Mrs. R. C. Haynes, Marshall, Mo., president of the Auxiliary of the Southern Medical Association, reviewed the objectives of the Southern, viz: (1) Doctors' Day observance; (2) Research in Romance of Medicine; (3) Jane Todd Crawford Scholarship and Student Loan Fund. She urged increased interest among younger doctors' wives.

Mrs. John W. Turner, Atlanta, gave a report of the Southern Medical Convention. She reported the red carnation adopted as official flower for Doctors' Day.

Mrs. Jas. N. Brawner was introduced as Honorary President for Life as the first president of the State Auxiliary and a past president of the County, State and Southern Auxiliaries.

Officers and chairmen of Standing Committees gave reports for the year.

Bibb County won the Mrs. Jas. N. Brawner Cup for general excellence.

Richmond County won the Achievement Award for sponsoring a series of lectures on Child Guidance.

Chatham County won the Exhibits Award.

Fulton County won first for the Scrapbook.

The entertainment consisted of a reception on Tuesday evening at the Sidney Lanier Cottage to which doctors and their wives were invited. On Wednesday a delicious Southern style luncheon was served at Wesleyan College. Attractive favors marked each place. Bathing beauties staged a fashion show dating from the "covered up" gay nineties to the "barely covered" models of today. Mrs. Harry Rogers was presented a silver bowl by Mrs. Maxwell Berry of Fulton County as an expression from her home auxiliary.

Mrs. Henry Tift's lovely home and gardens were the scene of a tea given by the Auxiliary on Wednesday afternoon.

Following business of Thursday the following slate selected by the nominating committee was elected:

President—Mrs. L. W. Williams, Savannah.

President-Elect—Mrs. J. R. S. Mays, Macon.

First Vice-President—Mrs. Ralph Fowler, Marietta.

Second Vice-President—Mrs. John W. Turner, Atlanta.

Third Vice-President—Mrs. Paul Russell, Albany.

Recording Secretary—Mrs. Leo Smith, Waycross.

Corresponding Secretary—Mrs. C. R. A. Redmond, Savannah.

Treasurer—Mrs. Robert C. Major, Augusta.

Historian—Mrs. Robert Crichton, Milledgeville.

Parliamentarian—Mrs. Bruce Schaefer, Toccoa.

Mrs. Ralph Chaney, Augusta, pinned the President's pin on Mrs. J. Harry Rogers, expressing sincere appreciation for her excellent year of service.

FAYE H. CLIFTON, Chm. Editorial Committee
(Mrs. Ben H. Clifton)

(Continued from Page 211)
(C. MacKenzie Brown, M.D.)

10. Shumacker, H. B., and Abramson, D. I.: Posttraumatic Vasomotor Disorders, Surg., Gynec. & Obst. 88:417-434 (April) 1949.

11. Faust, F. L.: Repeated Sympathetic Blocks: Their Limitation and Value, Anesthesiology 7:161-175 (March) 1946.

12. Steinbrocker, A.: Arthritis, Clinical and Medical Service 4th Division, New York University, Bellevue Hospital. Read before National Anesthesiology Congress, (Sept. 10) 1947.

13. Bageant, W. E., and Rapee, L. A.: Treatment of Pulmonary Embolus by Stellate Block, Anesthesiology 8:500-505 (Sept.) 1947.

14. Volpitta, P. P., and Risteen, W. A.: The Use of Stellate Ganglion Block in Cerebral Vascular Occlusion, Anesthesiology 4:403-408 (July) 1943.

15. Mandl, F.: Paravertebral Block, New York, Grune and Stratton, 1947, p. 91.

16. White, J. C.: Technique of Paravertebral Alcohol Injection, Surg., Gynec. & Obst. 71:334-354, 1940.

17. Stubbs, D., and Murphy, J. P.: The Treatment of Intractable Pain, New York State J. Med. 87:2094-2097 (Oct.) 1947.

18. Rovenstine, E. A., and Wertheim, H. M.: Therapeutic Nerve Block, J.A.M.A. 117:1599-1603 (Dec. 6) 1941.

DISCUSSION

DR. A. H. BUNCE (Atlanta): Mr. President and gentlemen, I wish to make just a few remarks about the paper by Dr. David Robinson on bursitis, from the standpoint of a medical man.

Many years ago Dr. J. W. Landham called my attention to the benefits to be derived from x-ray treatment in acute bursitis. I knew very little about the differential diagnosis of painful shoulders at that time; I don't know much more now.

In our practice the No. 2 ailment is rheumatism and arthritis, painful joints and muscles over the body. Painful shoulder is fairly frequent. Sometimes it is impossible, not infrequently it is impossible, to tell what is causing the painful shoulder.

However, we have found that if we do make an accurate diagnosis of an acute bursitis, beautiful results frequently are obtained by x-ray therapy, but not always. The longer the thing has existed, the less satisfactory is the treatment.

I state now that I am indebted to Dr. Landham for calling my attention to this treatment in a very distressing condition.

First, try to make an accurate diagnosis. Second, in those patients having acute bursitis, x-ray treatment certainly should be tried, because all too frequently unfortunately, all of our treatments fail.

DR. ROBERT DRANE (Savannah): Like Dr. Phillips, my endeavors are limited to a rather narrow field, and I am poorly qualified to discuss the surgical

papers. I appreciate the courtesy extended me in sending them, and I read the papers with interest. I see no reason to take issue with what the essayists have said. They have covered their subjects well.

Dr. Robinson's paper I agree with for the most part. In my experience I have had more patients with a left-side involvement than a right-sided involvement. I have always wondered about this, because most of them were right-handed men and a few women.

The method of treatment is much the same. I have gradually gotten into the habit of treating a patient four times within a week. If he comes on Monday I treat him anteriorly, and posteriorly the next day, skip a day, then anteriorly, and the next day posteriorly. I find I get much quicker results in relieving the pain—and that is the main reason why the patient comes.

I have had just as good results with a potential of 120 or 130 kilovolts rather than 200. The higher voltage is a little safer and there is less chance of skin damage. We give 125 r to thin patients and 150 r to heavier patients. We give each area two treatments anteriorly and posteriorly. If the machine is well calibrated, and if you intelligently administer the dose, I don't think you will have any side reaction. If I do not get results in this series of four treatments, I discontinue them and tell the patient I don't think he will be improved by further treatment.

DR. C. MacKENZIE BROWN (closing): In the paper on "Therapeutic Nerve Blocks," I devoted just one sentence to the subject of bursitis of the shoulder joint. There have been volumes written on the subject.

In January of this year an article appeared in the *Anesthesiology Journal*, reviewing the literature on the various methods of treatment of this condition. The conclusion of Dr. E. A. Rovenstine, who himself had 100 cases to report, was described. More satisfactory treatment was obtained by suprascapular nerve block. If a patient does not respond within 48 hours after a course of radiation therapy, the method should be considered a failure. Only an occasional case of chronic bursitis is cured by roentgen therapy. Comparing the latter with physical therapy almost identical results are obtained.

This is a simple maneuver. The suprascapular nerve is located in the suprascapular notch. This is as far behind the clavicle as the coracoid process is in front of the clavicle. You can feel the coracoid process on yourself—feel how far it is in front of the clavicle.

After arriving in Albany one of my first cases of bursitis was in the hospital administrator, an ex-football player. In this case the suprascapular nerve was blocked. Sixteen months have passed and his bursitis has not returned.

Since then other athletes, including baseball players, have had procaine block of the sensory pathway to the shoulder-joint. For athletic or nonathletic individuals, suprascapular nerve block in the treatment of bursitis in the shoulder joint has been highly successful.

A.M.A. PUBLISHES STORY OF CORTISONE AND ACTH

The first full and comprehensive report by Dr. Philip S. Hench and his collaborators at the Mayo Clinic, Rochester, Minn., on their original work with cortisone and ACTH is published by the American Medical Association in the April issue of *Archives of Internal Medicine*.

The article also contains a review of other pertinent experimentation on these and allied substances.

Co-authors with Dr. Hench are Edward C. Kendall, Ph.D., and Drs. Charles H. Slocumb and Howard F. Polley.

Studies which led to the use of the hormones and their effects in arthritis, rheumatic fever, lupus erythematosus disseminatus, psoriasis, tuberculosis, chronic ulcerative colitis, gout and allergic conditions are discussed.

NEWS ITEMS

(Continued from Page 217)

part in the program. Dr. Samuel E. Andrew, Waycross, superintendent of the Atlantic Coast Line Hospital, Dr. Lovick W. Pierce, Waycross, and Dr. W. S. Cook, Albany, attended the meeting.

* * *

Dr. J. M. Barnett, Albany physician, was recently re-elected to a four-year term as medical member of the Dougherty County Board of Health by Dougherty Superior Court's Grand Jury. Dr. Barnett, regarded as an international expert on malaria, its prevention and treatment, long has served as the County Board of Health's medical member.

* * *

The Bibb County Medical Society held its regular business meeting at the Georgia State Health Department Building, Macon, April 4. Dr. Henry H. Tift, secretary-treasurer.

* * *

Dr. Frank K. Boland, Atlanta physician and surgeon and recent author of "The Story of Crawford Long—The First Anesthetic", was one of the guest speakers at the Crawford W. Long Day observance held at the University of Georgia, Athens, March 30. Dr. Boland participated in the ceremony at Oconee Cemetery, where Dr. Long is buried, when a wreath was placed on Dr. Long's grave.

* * *

The Brooks County Medical Society declared in a statement issued to the press that President Truman's scheme for "Socialized Medicine" would deny medical care to many Americans who need it most and who are least able to pay for it. Members also emphasized that compulsory health insurance legislation proposed in Washington would "leave out in the cold of medical neglect" the indigent tuberculous, the insane, the nervous, veterans, ministers, and religious workers, domestic and farm labor, railroad workers, employees of cities, counties and states, and the needy indigent. "Tuberculosis is still a major problem in Georgia and the nation," the statement continued. "The insane often must go to jails to await room in an asylum. Yet these tragic people could not look to the Truman Plan for a haven." The American Medical Association estimates, using government VA figures as a basis, that 1,500,000 additional federal employees would be needed if the Truman health plan is enacted. "Under non-profit for hospital and other medical costs, the price for a family of four would be less than the cost of a package of cigarettes a day", the statement concluded.

* * *

Dr. R. L. Carter, Thomaston physician, recently spoke to the Pike County Lions Club at Molena, going into detail on the new Upson County-Thomaston Hospital now under construction in Thomaston. By the use of a slide projector, Dr. Carter showed photographs, as well as blueprints and diagrams which sketched all details of the new \$1,200,000 building. One hundred beds are planned for the hospital.

* * *

The Cerebral Palsy Society of Georgia held its second conference in East Point, March 28. Highlight of the meeting was a demonstration of a cerebral palsy clinic by Dr. Harriet Gillette, medical director at Aidmore Children's Convalescent Hospital, Atlanta, and cerebral palsy consultant. Dr. Gillette will confer with members of the cerebral palsy chapter at Macon regarding plans for the establishment of a clinic and training center.

* * *

The Crawford W. Long Memorial Hospital held its regular monthly dinner meeting of the staff in the dining room of the hospital, Atlanta, April 11. Program: "Two Bone Fractures of the Forearm", Dr. William Bondurant; "Morton's Neuroma of the Toe", Dr. R. L. Yeagan, Jr. Pediatric section: "Mortality

Statistics", Dr. Edwin Webb. Medical section: "Eosinophile Count in Myocardial Infarction", Dr. Arthur Moseley. General practitioners: Dr. Harry Ridley, program chairman. Surgical section: "Some Problems of Proctology", Dr. Edgar Boling.

* * *

The Crawford W. Long Memorial Hospital, through Dr. Wadley R. Glenn, Medical Director, announces the appointment of Dr. L. J. Miller as director of anesthesia, beginning April 15. Dr. Miller is already well known to the members of the visiting staff and the hospital personnel, having done a great part of his work here during the past four years. There will be no changes in the present personnel. Miss Regina Noon will retain her position as chief nurse anesthetist and Mrs. Alice B. Martin will retain her position as operating room supervisor.

* * *

The Crippled Children's division of the State Department of Welfare held an orthopedic clinic at the John D. Archbold Memorial Hospital, Thomasville, March 31. Dr. Fred Hodgson, Atlanta, who is in charge of the Crippled Children's work throughout the state, was among the orthopedists conducting the clinic. Others included Dr. Fred Murphy, Atlanta orthopedist, who will be in Thomasville in July for permanent residence, and Dr. Dunlap, who is orthopedist for Thomasville and Thomas County. Dr. Charles Watt, Thomasville surgeon, stated that it is the hope of the medical men of this district to establish a local Crippled Children's treatment center. This district covers 22 counties.

* * *

Dr. Mayhew Derryberry, Washington, D. C., director of health education for the United States Public Health Service, presided over the second Leadership Conference in Health Education held at the Hotel DeSoto, March 29-31. The conference was sponsored by the Chatham-Savannah Health Department and Chatham County public schools. Thirty-six local cooperating groups and agencies, together with numerous health education officials from throughout the State participated in the meetings. The purpose of the conference was to study accomplishments of the recommendations from the first conference which were put into effect in the county and city health programs.

* * *

Dr. Richard E. Felder, formerly associated with the Clark-Holder Clinic, LaGrange, has accepted a position as instructor in psychiatry in the clinical department of Emory University School of Medicine, Atlanta. The clinical department is located at Grady Memorial Hospital. Dr. Felder has been serving as resident physician in internal medicine at Grady Memorial Hospital since July 1, 1949 and will complete his residency in July of this year, when he will begin the duties of his new position. He graduated from Emory University School of Medicine, Atlanta, in 1944 and went into the Army Medical Corps in 1946. Following basic training he was assigned to the 319th Station Hospital at Bremerhaven, Germany. He served as chief of staff the last year he was in Bremerhaven.

* * *

Dr. Austin P. Fortney and Dr. James Freeman, two of Sylvania's young physicians, were recently presented certificates for outstanding services rendered the Medical Hospital at Fort Jackson during 1949, while members of the hospital staff. Lt. Col. S. E. Donhouser, commanding officer of Savannah military sub-district, presented the certificates in the presence of their families and the Rev. P. E. Miller. He stated that these were the first awards of that type that he had issued during his time as commander.

* * *

Georgia colleges will get \$12,547 for heart disease research out of \$220,000 grants-in-aid the American Heart Association recently announced. Two of the

grants are to the Emory University School of Medicine, Atlanta. One is \$4,725 for the study of physiology of the kidney by Dr. Walter H. Cargill. The other is \$5,250 for studying the physiology of circulation by Dr. James V. Warren. A grant of \$2,572 was made the Medical College of Georgia, Augusta, for pharmacologic studies by Dr. Raymond P. Ahlquist. The association previously had allotted \$8,000 for an investigation into the treatment of rheumatic fever. This project is being carried on at the Cardiac Clinic at Grady Memorial Hospital, Atlanta. The new grant makes a total of \$400,000 voted by the American Heart Association for research during the 1950-51 academic year.

* * *

The Georgia Department of Public Health, Atlanta, recently announced that eight Georgia medical officials have been certified by the American Board of Preventive Medicine and Public Health. Newly certified doctors include: Guy C. Lunsford, Atlanta, director of the division of local health organizations of the State Department; R. W. McGee, Atlanta, director of the Fulton County Health Department; T. O. Vinson, Decatur, director of the DeKalb County Health Department; J. A. Thrash, Columbus, director of the Muscogee County Health Department; Abe J. Davis, Augusta, director of the Richmond County Health Department; Floyd Payne, Rome, director of Battey Tuberculosis Hospital, and Guy V. Rice, Atlanta, director of the division of maternal and child health of the Georgia Department of Public Health.

* * *

Georgia observes Doctors' Day today. That kindly and lovable character, the family doctor, is in the limelight today.

This is "Doctors' Day" in Georgia. Every state has its annual day on which it pays tribute to the man who administers to those with sick and broken bodies. Georgia has set aside March 30 as Doctors' Day.

Why March 30?

Because that is the date on which Crawford Williamson Long, in Jefferson, Ga., administered ether to a patient before removing a tumor from the neck. That was in 1842, and it was the first recorded use of an anaesthetic in surgery.

Long's statue now stands in Statuary Hall in the Capitol, Washington, D. C.

Born at Danielsville, Georgia, Nov. 1, 1815, he graduated at Franklin College, Ga., and secured his medical education at Transylvania University and the University of Pennsylvania. He subsequently spent 18 months in New York City Hospital observing and performing surgical operations. In 1841 he returned to Jefferson, Georgia, to open his practice.

While there is no special observance in Valdosta of Doctors' Day, it is felt that citizens will want to pay tribute in their own silent way by reflecting on the boon to humanity that results from the practice of medicine under America's system of free enterprise.

It is probably appropriate here to recall the description, with a truly Scotch flavor, of William McLure, physician who practiced in Scotland, taken from "A Doctor of the Old School":

"The sight of him put courage into sinking hearts. But this was not by the grace of his appearance, or the advantage of a good bedside manner.

"A tall, gaunt, loosely-made man, without an ounce of superfluous flesh on his body, his face burned a dark brick color by constant exposure to the weather; red hair and beard turning grey, honest blue eyes that looked you ever in the face, huge hands with wrist-bones like the shank of a ham, and a voice that hurled his salutations across two fields, he suggested the morgue rather than the drawing room.

"But what a clever hand it was in operation, as delicate as a woman's; and what a kindly voice it was in the humble room where the shepherd's wife was

weeping by her man's bedside . . . that ugly scar that cut into his right eye-brow and gave him such a sinister expression was got one night when his horse slipped on the ice and laid him insensible eight miles from home. His limp marked the big snowstorms in the Fifties, when his horse missed the road and they rolled together in a drift. McLure escaped with a broken leg and the fracture of three ribs, but he never walked like other men again.

"But they were honorable scars, and for such risk of life men get the Victoria Cross in other fields. McLure got nothing but the secret affection of the Glen which knew that none had ever done one-tenth as much for it as this ungainly, twisted, battered figure.

"Many a face softened at the sight of him limping to his home."—From the editorial page of *Valdosta Daily Times* March 30, 1950.

* * *

The Georgia Medical Society held its regular meeting at 612 Drayton Street, Savannah, April 11. Program: "Polyps of the Lower Bowel", Dr. John C. Zirkle. Discussion led by Dr. Lee Howard, Jr. Dr. Sam Youngblood, Jr., secretary.

* * *

The Fulton County Medical Society held its dinner meeting at the Academy of Medicine, Atlanta, May 4. Program: Dr. J. D. Martin, Jr., moderator. "Chronic Subdural Hematoma", Dr. Robert F. Mabon; "A New Surgical Procedure in Treatment of Scoliosis", Dr. Paul L. Reith, and "Some Aspects of Chest Tomography," Dr. Ted Leigh.

* * *

The Habersham County Medical Society held its monthly meeting at the home of Dr. J. L. Walker, Clarksville, March 9. Dr. Harry Rogers, Atlanta surgeon, was guest speaker. He delivered an interesting and informative lecture on cancer. Members present were Drs. J. L. Walker, B. J. Roberts and George T. Nicholson. Guests included Dr. Rogers, Dr. L. C. Neal, Jr., Cleveland; Dr. Ben Nalley, Helen; Drs. Wm. H. Good, Jr., Arthur G. Singer, Jr., E. F. Chaffin, Chas. M. Henry, C. L. Ayers, Robert E. Shiffet, and W. B. Schaefer, all of Toccoa. The April meeting was held at the home of Dr. Joe J. Arrendale, Cornelia. Dr. W. J. Murphy, Atlanta, of the Department of Epidemiology of the Georgia Department of Public Health, was guest speaker. He spoke on "New Approaches in the Spread and Control of Contagious Diseases."

* * *

Dr. A. O. Linch, Atlanta, president of the Fulton County Medical Society, and Dr. Steve Garrett, Atlanta, president of the Georgia Dental Association, were among the first persons tested at the opening of the main station of the Greater Atlanta Screentest for Health April 11. Dr. T. F. Abercrombie, Atlanta, former head of the Georgia Department of Public Health, also attended the opening and called the testing program "one of the greatest advancements in safeguarding the public's health."

* * *

Major Tom F. Little, formerly Tifton physician, was recently named as the First Calvary division surgeon, with his new assignment at Camp Drake, headquarters of the First Calvary Division, Tokyo, Japan. Major Little, who arrived in the Far East Command in September 1949, enlisted in the military service August 1941. He has attended Medical Field Service School, Army School of Radiology, and Command and General Staff School while in the Army. He graduated from Tulane University of Louisiana School of Medicine, New Orleans, La. During World War II, Major Little served in the European theater and received credit campaigns in Morocco, North Africa, Sicily, Normandy, Northern France, the Ardennes and Middle Europe. He holds the Bronze Star with Oak Leaf Cluster, Distinguished Unit Citation with Oak Leaf Cluster, Belgium Fourre Guerre and the French Crois de Guerre.

Dr. Guy G. Lunsford, Atlanta, a veteran official of the Georgia Department of Public Health, recently resigned as head of the division of local health organization. Dr. Lunsford will join the Veterans' Administration as a medical officer in the insurance division. He will be succeeded by Dr. S. C. Rutland, now medical director of the west-central region with headquarters in Macon. Dr. Rutland was formerly county medical officer for Crisp and Jenkins counties.

* * *

Dr. Harry Lange, Atlanta pediatrician, recently attended the area meeting of the American Academy of Pediatrics held in Philadelphia.

* * *

Dr. Charles P. Marvin, Atlanta, has completed the requirements for certification to the American Board of Surgery. He has been approved by the Credentials Committee and is certified as of March 31, 1950.

* * *

Drs. Joseph C. Massee, Dan Burge and Charles E. Brown, Atlanta, announce the removal of their offices to 21 Eighth Street, N. E., Atlanta.

* * *

Dr. Jay McLean, Savannah, of the Savannah Tumor Clinic, addressed the members of the Men's Club of St. Michael's Episcopal Church, Savannah, March 28. His subject was "Cancer and Its Cure." Dr. McLean said "The picture is not as bleak and dark as many believe," and urged his hearers to take steps to see that they and members of their families "Elect not to die of cancer."

* * *

Medical Arts Building of Columbus, Inc., Columbus, was occupied on March 27. The T-shaped two-story white brick building is owned and operated by a corporation formed by the following Columbus physicians: Drs. A. N. Berry, H. J. Bickerstaff, C. C. Butler, W. G. Love, Jr., G. J. Dillard, J. B. Thompson, Bert Tillery and Luther H. Wolff. The new structure on the corner of Thirteenth Avenue and Thirteenth Street cost approximately \$200,000 and includes eight suites of six rooms each, with more than 50 public rooms. The air conditioned building was planned to include facilities for dental, x-ray, and pathologic installations as well as for physicians' offices. From 13 to 15 physicians will occupy the building.

* * *

The National Association of Manufacturers held a dinner meeting at the Atlanta division of the University of Georgia, Atlanta, March 22. The Georgia Industrial Dinner was sponsored by the Associated Industries of Georgia, the Cotton Manufacturers Association of Georgia and the National Association of Manufacturers. Religious, academic, political and personal freedom inevitably will be lost also if medicine and business are state controlled, an Atlanta medical leader asserted. Dr. A. O. Lynch, president of the Fulton County Medical Society, declared that American medicine, "under free practice and without compulsion, has accomplished results for which it need not apologize." Speaking for the dental profession, Dr. Steve A. Garrett, president of the Georgia Dental Association, pointed out that judging from the example in socialized England, "Dentists" are likely to be even more tightly shackled than doctors if the two professions were to be socialized." Dr. Edgar D. Shanks, Atlanta, secretary-treasurer of the Medical Association of Georgia, and Dr. C. L. Chandler, Jr., president of the Northern Dental Society, also endorsed the meeting. Claude A. Putnam, president of the NAM, and its managing director, attended the meeting. Norman Elsas, president of the Fulton Bag and Cotton Mills, and an NAM director, presided.

* * *

The Ninth District Medical Society held its meeting in Commerce, April 12, with 37 physicians attending. Scientific program: "The Doctor, the Public and the Government", Dr. Alex B. Russell, Winder; "Some

Problems in the Obstruction of the Neck of the Urinary Bladder", Dr. Rafe Banks, Jr., Atlanta; "The Use and the Mis-use of Quindine and Digitalis", Dr. J. B. Neighbors, Jr., Athens; "The Bedside Diagnosis of Acute Cardiac Arrhythmias", Dr. Bruce Logue, Atlanta. Officers elected were Dr. J. L. Walker, Clarksville, president; Dr. C. J. Roper, Jasper, vice-president; Dr. Hartwell Joiner, Gainesville, secretary-treasurer. The next meeting of the Ninth District Medical Society will be held in Gainesville next September.

* * *

Dr. Elton S. Osborn, Jr., Savannahian with the United States Public Health Service, was recently promoted to assistant chief in chronic diseases and his headquarters will be transferred from Atlanta to the national office in Washington. A son of Dr. and Mrs. Elton S. Osborn of Savannah, young Dr. Osborn has been very successful in his career with the U. S. Public Health Service, having rendered valuable service with the federal department during and since the war. He was at one time sent to Greece on a special mission. Dr. Osborn is a graduate of the University of Georgia School of Medicine, Augusta, and has had special courses at Johns Hopkins in Baltimore and in New Orleans.

* * *

Dr. James E. Paullin, Atlanta, was presented the Alfred Stengel Award for his work in the advancement of medical education and for outstanding service and loyalty to the American College of Physicians at the recent convention of the College in Boston. Dr. Paullin has served as president of the American Medical Association, the Medical Association of Georgia and the Fulton County Medical Society.

* * *

Dr. David Henry Poer, Atlanta surgeon, was elected secretary of the Southern Surgeons' Association at a meeting recently held in Charleston, S. C. Other officers elected were Dr. Clarence E. Gardner, Duke University physician, Durham, president; Dr. W. H. Prioleau, Charleston, vice-president, and Dr. George T. Wood, High Point, N. C., treasurer.

* * *

The Randolph-Terrell Medical Society members were honored at the annual Doctors' Day dinner, given by the Woman's Auxiliary to the Randolph-Terrell Society, at the Standley Oxford Clubhouse in Dawson. Dr. J. T. Arnold, Parrott physician, who has practiced medicine for 50 years, was honor guest and was introduced by Dr. Steve P. Kenyon, Dawson, past president of the Medical Association of Georgia. "How appropriate and fitting on this Doctors' Day that we, his fellow physicians, pay tribute and honor to this man who has given 50 years of his life in unselfish service to his fellowman," Dr. Kenyon said. "Few men have been more faithful to organized medicine than Dr. Arnold. . . . It is an honor to be a member of an Association which claims Dr. Arnold as one of its members. He exemplifies to the highest degree the noble traditions that have made the American general practitioner loved, respected and admired throughout the world," Dr. Kenyon said. In behalf of the Randolph-Terrell Medical Society, the honor guest was presented an engraved desk set. The principal address of the evening was made by Eck Patterson, of Cuthbert, who spoke humorously and informatively of the medical profession from horse and buggy days to present. He pointed out that there were three doctors present, Dr. Arnold, Dr. T. F. Harper and Dr. F. S. Rogers, who began their medical practice in the horse and buggy era.

* * *

Dr. C. Purcell Roberts, Atlanta physician, was inducted as a fellow of the American College of Physicians at the recent meeting held in Boston, Mass.

* * *

Dr. O. W. Roberts, Sr., one of Carrollton's best and most beloved and respected physicians, who has made

a lifetime work of serving the needs of those in pain, was listed on the editorial page of the *Georgian*, which is Carrollton's newspaper, under the heading "Georgian Spotlight", March 24. Like other doctors of Carrollton and Carroll County, Dr. Roberts has devoted his life to serving his fellowman, and the best monument which could possibly be erected in his honor would be the high health standards of Carrollton and Carroll County. Dr. Roberts has played a vital part in the constant effort to improve health and hospital facilities. He is another of the many who can take pride in the new Tanner Memorial Hospital, for not only did he take a huge part in getting the hospital built; he also is playing a vital role in keeping it operating so efficiently. He was honored by being named vice-president and vice-chief-of-staff of the hospital, but it was an honor well deserved for a man well grounded in the fundamentals of medicine and steeped in the honorable traditions of the profession which he chose for his life's work.

* * *

The Savannah Tuberculosis and Health Association officers entertained at a dinner in honor of Carl Fox, newly appointed executive secretary of the Georgia Tuberculosis Association, and Frank W. Webster, executive secretary of the North Carolina Association, March 16. The dinner preceded the annual meeting of the Savannah Tuberculosis Association which was held in the Georgian Room of the Hotel DeSoto, Savannah. Dr. C. A. Henderson, Savannah, city-county health officer, conducted Mr. Fox on a tour of the Health Department and the Tuberculosis Sanatorium while the new executive secretary was in Savannah.

* * *

The Savannah Tumor Clinic, 612 Drayton Street, Savannah, unveiled a plaque in the laboratory as a testimonial to the cooperation of Savannah Post No. 135, American Legion, in equipping the laboratory and aiding with its maintenance and operation, on April 16. Frank O. Wahlstrom, chairman of the board of the clinic, was the principal speaker. Persons prominently identified with the clinic and the work of the American Cancer Society in Savannah, as well as representatives of Savannah Post No. 135 were present. Formal acceptance of the gift was made by Thomas Oxnard, president of the clinic. Drs. M. M. Schneider and Harry M. Kandel attended as members of Post No. 135, American Legion. Dr. Lee Howard is director of the clinic and chairman of the committee of the Georgia Medical Society having medical charge of the project. Dr. Jay Howard is radiation therapy director.

* * *

The Second District Medical Society held its spring meeting at the American Legion home, Camilla, April 13. The meeting was called to order by the president, Dr. J. C. Brim, Pelham. Minutes of the previous meeting were read and approved, also the financial statement. Dr. Brim appointed a committee to nominate officers for the coming year and to select a site for the next meeting. He then read a letter from the Better Health Conference concerning a meeting in Albany at which they asked that the Second District Medical Society be represented, and the following were appointed to represent the society: Drs. Paul Russell, Albany; Carl Pittman, Jr., Tifton; John Tucker, Bainbridge, and M. W. Williams, Camilla. The matter of financial help to the small counties entertaining the District Society was again discussed. Dr. Carl Pittman, Sr. moved that the treasurer be empowered to discuss and to help any society that might need it. The motion was seconded and passed unanimously. There being no further business, the scientific program was turned over to the Georgia Heart Association, the sponsors. "The Recognition of Correctable Congenital Cardiac Defects", Dr. J. Willis Hurst, Atlanta; "Modern Treatment of Angina Pectoris and Coronary Throm-

bosis", Dr. Thomas L. Ross, Jr., Macon, and "The Bedside Diagnosis and Treatment of the Cardiac Arrhythmias," Arthur Knight. The three above-named papers were discussed from the floor and many questions were asked the visiting physicians, who graciously discussed all questions. This was one of the most enlightening and entertaining programs which has ever been presented to the society. Following the scientific program a social hour was held and a barbecue dinner served. During the dinner the nominating committee announced its nominees who were unanimously elected. They are Dr. Robert M. Joiner, Moultrie, president; Dr. Milton B. Bowman, Albany, vice-president, and Dr. Frank A. Little, Thomasville, secretary-treasurer. Albany was selected as the site for the October meeting. Dr. Frank A. Little, secretary-treasurer.

* * *

The Seventh District Medical Society held its meeting at the Sequoyah Country Club, Calhoun, April 5. Members were guests of the Gordon County Medical Society. Program: Invocation by the Rev. C. W. Pruitt; Address of Welcome by Dr. J. E. Billings, Calhoun; Report of minutes, report of committees, report of councilor, and introduction of new members. Scientific program: "The Judd Memorial Cancer Clinic—A Discussion of Cancer of Cervix," Dr. D. Lloyd Wood, Dalton. Discussion by Drs. J. T. McCall, Jr., Rome, and Alfred Colquitt, Jr., Marietta; "The Treatment of Apoplexy", Dr. Walter E. Boehm, Chattanooga, Tenn. Discussion by Drs. William Harbin, Rome, and W. U. Hyden, Trion; "Lower Nephron Nephrosis", Dr. W. B. McGuire, Chattanooga, Tenn. Discussion by Drs. R. F. Spanjer, Cedartown, and T. A. Cochran, Ringgold; "Bronchiectasis and Its Treatment", Dr. Osler A. Abbott, Atlanta. Discussion by Dr. Rufus Payne, Rome and Dr. Wilbur Hall, Calhoun. Officers are Dr. Sam H. Howell, Cartersville, president; Dr. Lee H. Battle, Jr., Rome, vice-president; Dr. S. B. Kitchens, Lafayette, secretary-treasurer, and Dr. D. Lloyd Wood, Dalton, councilor. Committee on arrangements were Drs. R. D. Walter, C. K. Richards and L. R. Lang, all of Calhoun.

The Woman's Auxiliary to the Seventh District Medical Society held its meeting at the Sequoyah Country Club, Calhoun, April 5. Welcome by Mrs. J. E. Billings, Calhoun; Response by Mrs. William T. Gist, Summerville; Reading of minutes; reports from County Auxiliaries, new business and election of officers. "A Discussion of Cancer", Dr. D. Lloyd Wood, Dalton. Officers are Mrs. William U. Hyden, Trion, District Manager, and Mrs. J. J. Allen, Trion, secretary.

* * *

The Regional Better Health Conference in Southwest Georgia held its first conference at Radium Springs Casino, near Albany, April 25. Dr. Steve P. Kenyon, Dawson, former president of the Medical Association of Georgia and Dr. O. F. Whitman, Albany, Regional Medical Director, were the featured speakers at the morning session. Twenty-eight counties were included in the conference, and community leaders attended. Participating in the discussion were selected community leaders and consultants from the Georgia Department of Public Health, among whom was Dr. T. F. Sellers, Atlanta, director of the Georgia Department of Public Health. All county representatives were given an opportunity to discuss their local health problems. Following the luncheon, Mrs. R. K. Winston, Tifton, who is chairman of the Executive Committee of the Better Health Conference of Georgia, addressed the conference. Participating in the afternoon discussion on "How to Get Community Action for Better Health" were representatives of the Community Councils of Worth, Tift, Sumter, Colquitt, Dougherty and Thomas counties. Mrs. Paul Russell, Albany, is chairman of the Southwest Regional Committee and planned the conference.

* * *

The Thomas County Medical Society sponsored a seminar at Archbold Memorial Hospital, Thomasville,

March 29, and is the first of its kind in the Thomasville area. Some 100 Georgia and Florida doctors attended the seminar. Dr. Mervin B. Wine of Thomasville, presided over the sessions. Dr. Philip K. Bondy of Emory University, Dr. Corbett Thigpen of Augusta, Dr. J. Mason Baird and Dr. William G. Hamm of Atlanta were the featured speakers.

* * *

Dr. A. Bruce Gill, Philadelphia, professor emeritus of orthopedic surgery, University of Pennsylvania School of Medicine, conducted a clinical pathological conference which was attended by the staffs of University Hospital, Oliver General Hospital, and the Lenwood, Augusta, March 14 and 15. He was in Augusta as the guest of the Georgia Medical College and Dr. Peter B. Wright, professor of orthopedic surgery at the medical college. Dr. Gill is regarded as one of the nation's outstanding orthopedic surgeons having made most of his splendid reputation in his work dealing with the pathology of the hip joint.

* * *

Veterans Administration Hospital, Augusta, held a conference and seminar on neuropsychiatry in which five Atlanta physicians participated, March 30-April 1. The conference was held in the Veterans Administration Hospital, Augusta. Noted specialists from New York, Boston and Washington were on the program. The meeting was open to private NP specialists and all others interested in the subject. Atlantans on the program included Dr. Frank B. Brewer, Southern area medical director for VA; Dr. Raymond S. Crispell, VA's Southeastern chief of neuropsychiatry; Dr. Estelle P. Boynton, of the mental hygiene clinic at VA's Georgia Regional Office; Dr. William Kauffman, chief of the psychiatric service at Lawson VA Hospital, and Dr. Charles R. F. Beall, examining psychiatrist at the regional office. The session was one of the most extended medical seminars devoted primarily to neurology which has been held in the South.

* * *

Dr. Hoke Wammock, Augusta, a professor in cancer research at the Medical College of Georgia, recently addressed the Junior Chamber of Commerce, Augusta, on "Cancer Research." Cancer is a greater killer of American children than polio, according to Dr. Wammock. He described methods used for early detection of cancer. He told of precautions which could be taken to guard partially against developing cancerous conditions.

OBITUARY

Dr. John Lee Campbell, aged 78, life-time resident of Ben Hill, died at his home April 16, 1950. Dr. Campbell was born in Ben Hill. He graduated from Atlanta Medical College, Atlanta, in 1896, and returned to Ben Hill, where he had practiced medicine for over 50 years. Active in church and civic work, he was a member of the Owl Rock Methodist Church, the Ben Hill Civic Club and several medical societies. Surviving are his daughter, Mrs. E. L. Rhodes, Bremen; a son, W. Lee Campbell, Ben Hill; three sisters, two brothers, and four grandchildren. Funeral services were held at the Owl Rock Methodist Church with the Rev. Jack Spear, the Rev. D. H. Maxey and the Rev. Henry T. Smith officiating. Burial was in the churchyard, Ben Hill.

* * *

Dr. Lewis Ryley Casteel, aged 82, widely known Wilkes County physician, died April 2, 1950, at his Washington home following a long illness. Dr. Casteel was born in Union County, Georgia, the son of the late Jones Casteel and Mrs. Rachel Byers Casteel. He graduated from Vanderbilt University School of Medicine, Nashville, Tenn., in 1893 and did post-graduate work in Baltimore and in 1906 did further graduate work at the Atlanta College of Physicians and Surgeons, Atlanta. He first practiced medicine in Cherokee County, N. C. and in Oklahoma. He moved to Washington,

Ga., in 1910 and had conducted general medical practice since. He was an honorary member of the Wilkes County Medical Society, the Medical Association of Georgia, and the American Medical Association, chairman of the trustees of Mary Willis Memorial Library, active Mason and associate teacher of the Jesse Mercer Men's Bible class at the First Baptist Church, Washington. At the 100th anniversary of the Medical Association of Georgia annual session held in Savannah, 1949, Dr. Casteel was awarded a Certificate of Distinction and a gold lapel button for his 56 years of distinguished service in the medical profession. He is survived by his wife, Mrs. Low Hollenshead Casteel; four daughters, Mrs. Albert Young, Washington; Mrs. S. A. Moore, Murphy, N. C.; Mrs. J. E. Jones, Mt. Holly, N. C., and Mrs. John McGehee, Cedartown; three sons, Radcliffe Casteel, Knoxville, Tenn.; R. G. Casteel, Lavana; B. W. Casteel, Metasville; a brother, Dr. Van D. Casteel, Copper Hill, Tenn.; 12 grandchildren and two great-grandchildren. Funeral services were held at the First Baptist Church, with the Rev. J. R. Kirkland officiating, and with the Rev. John Busby and the Rev. Owen Hoffman assisting. Burial was in Rehoboth churchyard.

* * *

Dr. Charles Howard Daniel, aged 50, College Park physician and surgeon, died at his home, 301 West Rugby Avenue, College Park, April 17, 1950. A native of Senoia, Dr. Daniel graduated from Emory University School of Medicine, Atlanta, in 1926. He interned at Grady Memorial and Georgia Baptist Hospitals. He started the practice of medicine in College Park in 1929, where he remained until his death. He was a member of the Fulton County Medical Society, the Medical Association of Georgia and the American Medical Association. Active in community life of College Park, Dr. Daniel was onetime director of the Atlanta Boys Club, a member of the Civitan Club, a Mason, and a Shriner. He was a leading layman of the College Park Methodist Church, having served as chairman of the building committee and superintendent of the Sunday School. He also served as a steward in the church. Surviving are his wife, Mrs. Charles Howard Daniel; two daughters, Miss Dorothy Ruth Daniel, Miss Sarah Susan Daniel; a sister, Mrs. Allen B. Cole, Claremont, Cal.; and a brother, Frank P. Daniel, Senoia. Funeral services were held at the College Park Methodist Church with the Rev. R. J. Kerr, the Rev. J. W. Veatch and the Rev. R. C. Cleckler officiating. As escort the members of the Board of Stewards of the College Park Methodist Church. Burial was in Senoia Cemetery.

* * *

Dr. Roscoe Hinson Enzor, Sr., Smithville, aged 62, died at the Americus and Sumter County Hospital, Americus, following a long illness April 12, 1950. Dr. Enzor graduated from the Atlanta College of Physicians and Surgeons, Atlanta, in 1911, now Emory University School of Medicine. Dr. Enzor was a prominent physician and surgeon of Smithville and Lee County for the past 17 years. He was a former mayor of Smithville, having served for five terms. He was health officer of Lee County and a director of the Farmers & Merchants Bank of Smithville. He was a member of the Smithville Baptist Church, serving as deacon and clerk. He was a past master of the Smithville Masonic Lodge No. 250 and at his death was treasurer of the group. He was an honorary member of the Sumter County Medical Society, the Medical Association of Georgia and the American Medical Association. He is survived by his wife, Mrs. Lulah Finnell Enzor; one son, Roscoe Enzor, Jr., Atlanta; two daughters, Mrs. A. K. Livingston, Mobile, Ala., and Mrs. Charles T. Dietrich, Smyrna, Delaware, and two grandchildren. Also four brothers and two sisters. Funeral services were held at the Smithville Baptist Church, with the Rev. Alec Thompson, pastor, officiating, assisted by the Rev. Joe H. Bridges, of the Dawson Street Methodist Church, Thomasville. Burial was in Smithville Cemetery.

Dr. Marion McHenry Hull, aged 78, Atlanta physician and co-founder of the Atlanta Bible Institute and former member of the Committee of 100 Fundamentalists, died of a heart attack while teaching a Bible Class at the Institute March 28, 1950. Dr. Hull, a native of Athens, was one of the nation's most widely known religious figures as well as a leading Atlanta physician. He received his medical degree from Georgetown University School of Medicine, Washington, D. C. Following his internship at Bellevue Hospital, New York, he came to Atlanta, first as a staff member of the old Presbyterian Hospital and later a member of the advisory staff of Crawford W. Long Memorial Hospital. At the time of his death he was chairman of the Board of Trustees as well as one of the Bible Institute's leading instructors. He had written several religious books and pamphlets and at the time of his death was working on an interlinear translation of the New Testament from Greek into English. His religious work led, following the death of William Jennings Bryan, to his appointment as a member of the Committee of 100 Fundamentalists, composed of leading religious figures throughout the world. He was a charter member of the North Avenue Presbyterian Church and was a member of the Board of Elders. He was an honorary member of the Fulton County Medical Society, the Medical Association of Georgia and the American Medical Association. Surviving are his wife, the former Vara Curry, Marysville, S. C.; a daughter, Mrs. S. L. Morris, Atlanta; two sons, Thomas C. Hull and Richard L. Hull, both of Atlanta; a brother, three sisters, and several grandchildren. Funeral services were held at Spring Hill, with the Rev. Richard Orme Flinn, Jr., officiating. Burial was (private) in West View Cemetery, Atlanta.

EMORY POSTGRADUATE MEDICAL CLINICS

Sponsored by the Medical Alumni Association of Emory University

May 31, June 1 and 2, 1950

PROGRAM

Grady Memorial Hospital—Wednesday, May 31, 1950

SURGICAL PROGRAM

- (1) 9:00 a.m. *Bleeding in the Last Trimester of Pregnancy*—Dr. John S. Fish.
- (2) 9:30 a.m. *Gastrointestinal Hemorrhage*—Dr. Ira A. Ferguson.
- (3) 10:00 a.m. *Significance of Thyroid Adenoma*—Dr. D. Henry Poer.
- (4) 10:30 a.m. *Cholelithiasis*—Dr. V. Duncan Shepard.
- (5) 11:00 a.m. *Appendiceal Peritonitis*—Dr. A. Eugene Hauck.
- (6) 11:30 a.m. Open.

MEDICAL PROGRAM

- (A) 9:30 to 10:30 a.m. *The Diagnosis of Obscure Fevers*—Dr. Paul B. Beeson.
- (B) 10:30 to 11:30 a.m. *Lymphoma and Hematologic Problems: Diagnostic and Therapeutic Techniques*. Dr. Charles M. Huguley, Dr. Milton H. Freedman, Dr. Byron J. Hoffman.
- 12:00 to 1:00 p.m. THE WILLIAM SIMPSON ELKIN LECTURE. Guest speaker: Dr. W. C. Sealy, Assistant Professor of Surgery, Duke University. "Surgical Treatment of Congenital Anomalies of Heart and Great Vessels."
- 1:00 to 2:00 p.m. Lunch—Grady Memorial Hospital as guests of the University.

SURGICAL PROGRAM

- (7) 2:15 p.m. *Gastrointestinal Carcinoma*—Dr. John S. Atwater, Dr. George R. Hrdlicka, Dr. Charles S. Jones.

- (8) 3:45 p.m. *Hyperthyroidism*—Dr. Philip K. Bondy, Dr. John T. Akin, Dr. Charles M. Huguley.

MEDICAL PROGRAM

- (C) 2:15 to 3:00 p.m. *Recent Advances in the Diagnosis and Treatment of Syphilis*—Dr. Albert Heyman, Dr. Walter H. Sheldon.
- (D) 3:15 to 4:15 p.m. *A Study of Cerebral Blood Flow and Its Clinical Implications*—Dr. John L. Patterson, Dr. Albert Heyman.

Grady Memorial Hospital—Thursday, June 1, 1950

SURGICAL PROGRAM

- (9) 9:00 a.m. *Cancer of the Prostate*—Dr. M. K. Bailey.
- (10) 9:30 a.m. *Prolonged Labor Have Oxytocics a Place in Management?*—Dr. John R. McCain.
- (11) 10:00 a.m. *Local Care of Burns*—Dr. Frank F. Kanthak.
- (12) 10:30 a.m. *Surgery of Pain*—Dr. Homer S. Swanson.
- (13) 11:00 a.m. *Significance of Solitary Breast Tumor*—Dr. Wadley R. Glenn.
- (14) 11:30 a.m. *Abdominal Surgery of the Newborn*—Dr. Charles E. Holloway.

12:00 to 1:00 p.m. DR. WILLIAM CHESTER WARREN, SR., MEMORIAL LECTURESHIP. Guest speaker: Dr. G. E. Burch, Professor of Medicine, Louisiana State University, "Aspects of Venous Pressure."

1:00 to 2:00 p.m. Lunch — Grady Memorial Hospital as guests of the University.

SURGICAL PROGRAM

- (15) 2:15 p.m. *Ulcerative Colitis*—Dr. Lon W. Grove, Dr. T. Sterling Claiborne, Dr. Joseph H. Hilsman.
- (16) 3:45 p.m. *Toxemia in Pregnancy*—Dr. Rudolph A. Bartholomew, Dr. Charles B. Upshaw, Dr. R. K. Hancock.

MEDICAL PROGRAM

- (G) 2:15 to 3:00 p.m. *Visit to Laboratories with a Discussion of Research in Progress*—Dr. Arthur J. Merrill, Dr. Philip K. Bondy, Dr. Paul B. Beeson.
- (H) 3:15 to 4:15 p.m. *Infectious Diseases: Aids in Diagnosis and Treatment*—Dr. William F. Friedewald, Dr. Max Michael, Jr.

Emory University Hospital—Friday, June 2, 1950

SURGICAL PROGRAM

- (17) 9:00 a.m. *Complications of Splenectomy*—Dr. John D. Martin, Jr.
- (18) 9:30 a.m. *Thoracic Emergencies*—Dr. Osler A. Abbott.
- (19) 10:00 a.m. *Cancer of Lip and Tongue*—Dr. J. Elliott Scarborough.
- (20) 10:30 a.m. *Congenital Dislocation of the Hip*—Dr. Robert P. Kelly.
- (21) 11:00 a.m. *Conservative Pelvic Surgery*—Dr. John H. Ridley.
- (22) 11:30 a.m. *Sinusitis*—Dr. Lester A. Brown.

MEDICAL PROGRAM

- (I) 9:30 to 10:20 a.m. *The Physiology of the Adrenal Pituitary Axis and its Clinical Applications*—Dr. Philip K. Bondy, Dr. Hugh G. Mosley.
- (J) 10:30 to 11:30 a.m. *Use and Results of Cortisone Therapy (Movie)*—Dr. Vernon E. Powell.

12:00 to 1:00 p.m.	Guest speaker: Dr. Arthur P. Richardson, Professor of Pharmacology, Emory University, "Recent Advances in Drugs, Affecting the Autonomic Nerves."	(24) 3:45 p.m.	<i>Peripheral Vascular Disease</i> —Dr. Carter Smith, Dr. Cleve Ward, Dr. William H. Proctor, Jr.
1:00 to 2:00 p.m.	Lunch—Robinson Memorial Dining Room, Alumni Memorial Building, as guests of the University.	(K) 2:15 to 3:00 p.m.	<i>Cardiac Catheterization and Its Clinical Application</i> —Physiology Laboratory.
		(L) 3:15 to 4:15 p.m.	<i>Cine-Angiocardiology and its Clinical Application</i> (Movie)—Dr. H. Stephen Weens.
		7:30 p.m.	Annual Banquet of the Emory University Medical Alumni Association at the Capital City Club. Ladies invited. Formal dress optional.
SURGICAL PROGRAM			
(23) 2:15 p.m.	<i>Symposium on Backache</i> —Dr. Edgar F. Fincher, Dr. Paul L. Rieth.		

REGISTRATION AT THE ONE HUNDREDTH ANNUAL SESSION OF THE MEDICAL ASSOCIATION OF GEORGIA, MACON

A		Bradley, D. M., Waycross	Crowdis, James H., Jr., Blakely
Abbott, Osler A., Emory University	Brawner, James N., Jr., Atlanta	Cruise, Joe S., Atlanta	
Abercrombie, T. F., Atlanta	Brim, J. C., Pelham	D	
Adams, J. Fred, Montezuma	Broadrick, G. L., Dalton	Dallas, R. E., Thomaston	
Agee, M. P., Augusta	Brown, F. Bert, Savannah	Dancy, William R., Savannah	
Aiken, W. W., Lyons	Brown, George W., Griffin	Daniel, J. W., Sr., Savannah	
Aldrich, F. N., Macon	Brown, J. B., Jr., Baxley	Daniel, Walter W., Atlanta	
Alexander, George H., Forsyth	Brown, Lester A., Atlanta	Davis, Abe J., Augusta	
Allen, Eustace A., Atlanta	Brown, R. G., Swainsboro	Davis, E. B., Byromville	
Allen, H. D., Jr., Milledgeville	Brown, Roland A., Atlanta	Davis, Shelley, Atlanta	
Allison, Gordon G., Atlanta	Brown, Robert L., Atlanta	Davis, W. Ben, College Park	
Anderson, Carl L., Macon	Bryan, Wm. W., Atlanta	Dean, H. B., Unadilla	
Anderson, J. C., Macon	Bunce, Allen H., Atlanta	DeFreese, S. J., Monroe	
Anderson, Robert T., Atlanta	Buckner, Frank, Albany	Denny, R. L., Carrollton	
Anderson, Samuel A., Atlanta	Burdine, W. E., Blue Ridge	Derrick, H. C., Sr., Oglethorpe	
Anderson, W. W., Atlanta	Burleigh, Bruce D., Marietta	DeVaughn, N. M., Augusta	
Arnold, J. T., Parrott	Buſey, T. J., Fayetteville	Dillard, G. J., Columbus	
Arnold, M. F., Hawkinsville	Bush, Albert R., Hawkinsville	Dodd, William A., Dublin	
Arp, C. R., Atlanta	Bush, Holloway, Macon	Dorough, W. S., Atlanta	
Arrendale, Joe J., Cornelia	Byne, J. M., Jr., Waynesboro	Dowman, Charles E., Atlanta	
Atkins, Harold C., Macon	C	Downman, Cordelia K., Atlanta	
Atwater, John S., Atlanta	Campbell, J. I., Jr., Valdosta	Drane, Robert, Savannah	
Ayers, C. L., Toccoa	Carter, J. G., Scott	Duggan, A. D., Washington	
Ayers, Sanford E., Atlanta	Carter, R. L., Thomaston	DuPree, George W., Gordon	
B		DuPree, John T., Macon	
Bailey, Thomas E., Augusta	Carv, R. Frank, Macon	Durham, W. P., Abbeville	
Bancker, E. A., Atlanta	Calloway, Fnoch, LaGrange	DuVall, W. B., Atlanta	
Barnett, J. M., Albany	Calhoun, F. P., Jr., Atlanta	E	
Barner, John L., Athens	Carson, Willard P., Chatsworth	Eberhart, Charles E., Atlanta	
Bashinski, Benjamin, Macon	Cason, Hugh R., Warrenton	Edenfield, R. W., Macon	
Bates, W. B., Waycross	Cathcart, Don F., Atlanta	Elliott, W. G., Cuthbert	
Barton, W. L., Macon	Chambers, J. W., LaGrange	Ellis, John, Atlanta	
Battle, Lee H., Jr., Rome	Chaney, Ralph H., Augusta	Ellison, Robert G., Augusta	
Baxley, Harry B., Donalsonville	Cheshire, H. L., Thomasville	Equen, Murdock, Atlanta	
Baxley, W. C., Blakely	Chesnut, T. H., Milledgeville	Erwin, G. Y., Athens	
Baxley, W. W., Macon	Cheves, H. L., Union Point	Evans, Albert L., Atlanta	
Bazemore, W. L., Macon	Chrisman, W. W., Macon	F	
Beasley, B. T., Atlanta	Clark, James I., Atlanta	Farmer, C. Hall, Macon	
Belcher, F. S., Monticello	Claxton, E. B., Dublin	Fenn, Henry R., Americus	
Bell, John A., Jr., Dublin	Clifton, Ben H., Atlanta	Ferrell, R. G., Macon	
Bell, Rudolph, Thomasville	Cluxton, Harlev E., Jr., Savannah	Ferrell, T. J., Waycross	
Bellhouse, Helen W., Atlanta	Cobb, Tyrus R., Jr., Dublin	Fisher, Albert, Jr., Monticello	
Bennett, Robert L., Warm Springs	Cofer, Olin S., Atlanta	Fitts, John B., Atlanta	
Benson, H. Bagley, Atlanta	Coker, Grady N., Canton	Fletcher, I. Elizabeth, Statesboro	
Benson, Wm. H., Marietta	Cole, A. A., Macon	Floyd, Chas. S., Loganville	
Benton, C. C., Macon	Coleman, Fred I., Dublin	Floyd, Waldo E., Statesboro	
Berg, Joseph L., Albany	Coleman, O. K., Vienna	Foster, G. R., Jr., McDonough	
Billinghurst, George A., Macon	Coleman, Reese C., Jr., Atlanta	Foster, H. A., LaGrange	
Bishop, Everett L., Atlanta	Coleman, Y. R., Jonesboro	Fowler, A. H., Marietta	
Bloise, F. L., Dublin	Collier, Thos. J., Atlanta	Fowler, Major, Atlanta	
Blum, Leo J. Jr., Warner Robins	Collier, T. W., Brunswick	Fowler, R. W., Marietta	
Boland, Chas. G., Atlanta	Collins, Braswell F., Waycross	Frech, H. C., Savannah	
Boland, Frank K., Atlanta	Collins, R. A., Jr., Montezuma	Freedman, Milton H., Atlanta	
Bond, Dr. D. T., Danielsville	Collinsworth, P. L., Atlanta	Fulghum, Charles B., Milledgeville	
Bonner, Wm. H., Athens	Cook, Ellison R., Savannah	Fuller, George W., Atlanta	
Born, W. H., McRae	Corn, Ernest, Macon	Funke, John, Atlanta	
Boswell, W. C., Macon	Crawford, H. C., Atlanta	G	
Boyd, Hartwell, Atlanta	Crawley, Walter G., Marietta	Gallemore, J. L., Perry	
Boyette, L. S., Ellaville	Crichton, Robert B., Milledgeville		
	Cross, John B., Atlanta		

Galloway, William H., Atlanta
 Galvin, W. H., Emory University
 Garner, John P., Atlanta
 Garrard, J. L., Rome
 Gatewood, T. Schley, Americus
 Gershon, Nathan, Atlanta
 Gibson, Wallace M., Milledgeville
 Gilbert, R. B., Greenville
 Gillette, Harriet E., Atlanta
 Goldstein, Jay, Warner Robins
 Golsan, Willard R., Macon
 Goodman, L. J., Macon
 Goodwyn, Thos. P., Atlanta
 Goodyear, Wm. E., Atlanta
 Goolsby, R. Cullen, Jr., Macon
 Goss, Woodrow, Richland
 Gower, W. J., Thomaston
 Green, Charles G., Waynesboro
 Greene, Ed H., Atlanta
 Griffin, E. L., Atlanta
 Griffin, L. H., Claxton
 Griggs, Harvey E., Conyers
 Gross, O. S., Vidalia
 Grubbs, J. H., Molena

H

Hall, S. H., Macon
 Hall, Thomas M., II, Milledgeville
 Hall, W. D., Calhoun
 Hallum, Alton, Atlanta
 Hamm, W. G., Atlanta
 Hammond, G. W., Newnan
 Hammond, R. L., Jackson
 Hancock, S. L., Cairo
 Hardman, Billy S., Gainesville
 Harper, Sage, Douglas
 Harrell, H. P., Augusta
 Harris, B. W., Sea Island
 Harrold, Thomas, Macon
 Hatcher, Milford B., Macon
 Hazlehurst, W. D., Macon
 Head, M. M., Zebulon
 Hendrick, A. G., Perry
 Hendrix, A. M., Canton
 Hendry, Katherine M., Blackshear
 Hendry, Wm. A., Blackshear
 Henry, C. G., Augusta
 Hensley, E. A., Gibson
 Herault, Pierre C., LaGrange
 Hicks, Thomas J., McCayesville
 Hicks, W. G., Jackson
 Hilsman, J. H., Atlanta
 Hock, Charles W., Augusta
 Hodges, Chas. A., Dublin
 Hodgson, Fred G., Atlanta
 Holliman, Henry D., Atlanta
 Horton, B. E., Atlanta
 Holton, C. F., Savannah
 Houser, F. M., Macon
 Hubert, M. A., Athens
 Huguley, Chas. M., Jr., Emory
 University
 Hinson, W. J., Covington

J

Jacobs, John L., Atlanta
 James, David F., Emory University
 James, L. P., Macon
 Jarratt, W. D., Macon
 Jernigan, C. S., Sparta
 Jernigan, H. W., Atlanta
 Jernigan, Sterling, Atlanta
 Johnson, A. M., Valdosta
 Johnson, McClaren, Atlanta
 Johnson, Roy J., Jr., Fitzgerald
 Joiner, Horace G., Douglas
 Jones, Alex P., Griffin
 Jones, H. T., West Point

Jones, John P., Macon
 Jones, R. E., Tifton
 Jordan, William K., Macon

K

Kanibak, F. F., Atlanta
 Karpat, Robert, Dublin
 Kay, James B., Byron
 Keen, O. F., Macon
 Kelley, D. C., Lawrenceville
 Kellum, J. Morgan, Thomaston
 Kemper, Clifton G., Atlanta
 Kennedy, F. D., Baxley
 Kenyon, Steve P., Dawson
 King, J. Dudley, Atlanta
 King, James T., Atlanta
 King, J. L., Sr., Macon
 King, John T., Thomasville
 King, Ruskin, Savannah
 Kirkland, Spencer A., Atlanta
 Kiser, Ellen Finley, Atlanta
 Kiser, William, Jr., Atlanta
 Kite, J. H., Atlanta
 Klemann, Gilbert L., Augusta
 Knight, Arthur, Waycross
 Krantz, S., Chamblee

L

Lancaster, E. M., Shady Dale
 Landham, J. W., Atlanta
 Lane, George M., Forsyth
 Lang, G. H., Savannah
 Lange, J. Harry, Atlanta
 Lanier, L. I., Soperton
 Lee, H. G., Millen
 Leigh, Ted F., Atlanta
 Lennard, O. D., Sandersville
 Leonard, W. P., Atlanta
 LeRoy, Albert G., Thomson
 Leslie, John T., Decatur
 Lester, Wm. M., Atlanta
 Lewis, John R., Louisville
 Lewis, John R., Jr., Atlanta
 Lewis, W. E., Macon
 Linch, A. O., Atlanta
 Little, A. G., Valdosta
 Logue, Bruce, Atlanta
 Long, H. W., Eastman
 Long, Leonard, Atlanta
 Looper, Ben Keith, Canton
 Lott, Oscar H., Savannah
 Lovell, W. W., Atlanta
 Lowe, W. R., Midville
 Lowance, M. I., Atlanta
 Lucas, Paul W., Tifton

M

Mallory, M. L., Vienna
 Maloy, C. J., McRae
 Mann, D. S., Albany
 Mann, F. R., McRae
 Marshall, A. S., Fort Valley
 Martin, J. D., Jr., Atlanta
 Martin, John M., Augusta
 Martin, Robert B., Cuthbert
 Martin, Walter D., Augusta
 Martin, W. O., Jr., Atlanta
 Mass, Max, Macon
 Massenburg, G. Y., Macon
 Massey, W. F., Chester
 Maxwell, Edgar J., Jr., Athens
 Mays, J. R. S., Macon
 McAllister, Robert W., Macon
 McArthur, Charles E., Cordele
 McCarver, W. C., Vidette
 McClelland, Spence, Atlanta
 McCoy, John F., Moultrie
 McCoy, W. R., Folkston
 McDaniel, J. G., Atlanta

McDaniel, J. Z., Albany
 McDonald, E. M., Winder
 McDonald, Harold, Atlanta
 McDonald, Lewis H., Atlanta
 McDougall, J. Calhoun, Atlanta
 McElroy, J. D., Atlanta
 McFarlane, J. W., Macon
 McGeary, W. C., Madison
 McGee, H. H., Savannah
 McGuire, T. H., Houston, Texas
 McLaughlin, C. K., Macon
 McLean, Jay, Savannah
 McMath, W. B., Americus
 McMillan, E. C., Jr., Macon
 McMillan, J. C., College Park
 Meaders, H. D., Newnan
 Meeks, Calvin S., Douglas
 Mendenhall, W. A., Chamblee
 Mercer, J. E., Vidalia
 Meriwether, W. W., Macon
 Middlebrooks, T. W., Union Point
 Milford, Hubert, Hartwell
 Miller, Linus J., Atlanta
 Minchew, B. H., Waycross
 Mitchell, William E., Atlanta
 Mobley, Walter E., Macon
 Molyneaux, Evan W., Hogansville
 Montgomery, R. C., Butler
 Moore, Henry M., Thomasville
 Morrison, Howard J., Savannah
 Morton, John B., Thomasville
 Muecke, H. W., Waycross
 Mulkey, A. P., Millen
 Mullins, D. F., Jr., Athens
 Murphy, W. J., Atlanta
 Murray, George S., Columbus
 Musc, L. H., Atlanta

N

Neal, Jules C., Jr., Macon
 Neal, L. G., Jr., Cleveland
 Neely, F. L., Atlanta
 Neill, F. K., Albany
 Neuberg, S. Charlotte, Macon
 Newman, W. A., Macon
 Newsom, N. J., Sandersville
 Newton, R. G., Macon
 Nippert, P. H., Atlanta
 Norris, Jack C., Atlanta
 Nunez, M. Fernan, Dublin

O

Oliver, J. A., Douglas
 O'Neal, John B., III, Elberton
 O'Neal, Phyllis J., Elberton
 Osborne, V. W., Atlanta
 Osteen, W. L., Savannah
 Owensby, N. M., Atlanta

P

Palmer, Clarence B., Covington
 Palmer, J. W., Ailey
 Parkerson, Sidney T., McRae
 Patrick, E. V., Carrollton
 Patton, Sam, Macon
 Payne, Rufus, Rome
 Peacock, T. G., Milledgeville
 Pendergrass, R. C., Americus
 Peterson, T. A., Savannah
 Phillips, A. M., Macon
 Poer, David Henry, Atlanta
 Poliakoff, S. R., Atlanta
 Porch, Leon D., Macon
 Powell, Fincher C., Decatur
 Prince, Charles L., Savannah
 Priviteri, Charles A., Chamblee
 Pruce, Arthur M., Atlanta
 Pruitt, M. C., Atlanta
 Puett, W. W., Norcross

Pumpelly, R. A., Jesup
Pursley, Norman B., Milledgeville

R

Raiford, Morgan, Atlanta
Rankin, Joseph L., Atlanta
Rawls, Lewis L., Macon
Rayle, A. A., Atlanta
Reavis, W. F., Waycross
Redfearn, J. A., Albany
Reese, D. S., Carrollton
Reeve, Tom, Carrollton
Reiffer, R. M., Macon
Revell, W. J., Louisville
Reynolds, H. M., Cairo
Rhyne, W. P., Albany
Richardson, C. H., Macon
Richardson, C. H., Jr., Macon
Richardson, Rhea W., Macon
Kicketson, G. M., Douglas
Ridgeway, Robert E., Royston
Ridley, C. L., Sr., Macon
Ridley, Charles L., Jr., Macon
Ridley, John H., Atlanta
Rieth, Paul L., Atlanta
Roberson, Phil E., Albany
Roberts, M. Hines, Atlanta
Robinson, David, Savannah
Robinson, John H., III, Americus
Robinson, R. L., Atlanta
Rogers, Harry, Atlanta
Rogers, J. V., Cairo
Rogers, James V., Jr., Emory
University

Roper, E. A., Jasper
Rosen, E. F., Savannah
Rosen, Samuel F., Savannah
Roughlin, L. C., Atlanta
Rubin, S. N., Gordon
Rudder, Fred F., Atlanta
Rumble, Charles T., Macon
Russell, Alex B., Winder
Russell, Paul T., Albany

S

Sage, Dan Y., Atlanta
Saggus, J. G., Harlem
Sams, J. R., Covington
Sapp, C. J., Rome
Sappington, T. A., Thomaston
Savage, C. P., Montezuma
Saye, E. B., Thomasville
Scardino, Peter L., Savannah
Schaefer, W. B., Toccoa
Schroder, J. Spalding, Atlanta
Seaman, H. A., Waycross
Sellers, T. F., Atlanta
Selman, W. A., Atlanta
Semans, James H., Atlanta
Seymour, Glenn E., Albany
Shanks, Edgar D., Atlanta
Sharp, C. K., Arlington
Sharpe, W. W., Alma
Shepard, Duncan, Atlanta
Shepard, W. O., Bluffton
Shuman, Vilda, Waycross
Siegel, Alvin E., Macon
Sikes, Walter A., Milledgeville
Simmons, J. W., Brunswick
Simonton, Fred H., Chickamauga
Simpson, Addison W., Jr., Washington
Simpson, John A., Athens
Skobba, Joseph S., Atlanta
Snaha, T. G., Griffin
Smith, George B., Rome
Smith, Harold, Savannah
Smith, Leighton A., Quitman

Smith, Leo, Waycross
Smith, Richard L., Cochran
Smith, W. P., Sr., Bowdon
Smith, W. P., Decatur
Stamps, Edward R., Waycross
Standifer, J. G., Blakely
Stapleton, J. W., Dublin
Stewart, J. Benham, Macon
Stoner, W. P., Sylvester
Stump, R. L., Valdosta
Suarez, Raymond, Macon
Swanson, Homer, Atlanta
Swilling, Evelyn, Macon

T

Tankersley, R. M., Atlanta
Taylor, K. L., Davisboro
Taylor, William J., Atlanta
Thomas, David R., Augusta
Thompson, E. A., Emory University
Thompson, O. K., Macon
Thwaite, Walter G., Quitman
Tidmore, J. L., Atlanta
Titt, Henry H., Macon
Trincher, Irvin H., Emory
University
Turner, Edwin W., East Point
Turner, John W., Atlanta
Turner, W. W., Nashville
Tyler, Herbert D., Thomaston

U

Upshaw, C. B., Atlanta
Upchurch, W. E., Atlanta

V

Vinson, Frank, Fort Valley
Vinson, Thos. O., Decatur
Vinton, Luther M., Atlanta

W

Wagnon, Geo. N., Atlanta
Walker, D. D., Macon
Walker, Exum, Atlanta
Walt, C. K., Thomasville
Waller, Robert D., Milledgeville
Ware, D. B., Fitzgerald
Ware, Ford, Macon
Wasden, C. N., Macon
Wasden, Howell A., Jr., Pavo
Watson, E. R., Macon
Weaver, H. G., Macon
West, Edward M., Atlanta
Whatley, E. C., Reynolds
Whitehead, C. Mark, LaGrange
Wilkes, W. A., Augusta
Williams, C. Roy, Wadley
Williams, David C., Sr., Milledgeville
Williams, Hiram J., Cordele
Williams, J. Weldon, Jr., Lavonia
Williams, L. W., Savannah
Williams, P. L., Cordele
Williams, W. A., Macon
Willis, T. V., Brunswick
Wilson, Richard, Atlanta
Winston, Richard K., Tifton
Wolff, Luther N., Columbus
Wood, D. Lloyd, Dalton
Woods, O. C., Milledgeville
Wootten, L. O., Cordele
Work, S. D., Jr., Macon
Wright, Peter B., Augusta

Y

Yampolsky, Joseph, Atlanta
Yarbrough, Y. H., Milledgeville
Youmans, H. D., Loyns

VISITORS

B

Baldwin, Robert E., Chamblee
Baird, Warren A., Toledo, Ohio
Barksdale, John H., Dublin
Barnes, Walter, Jr., Atlanta
Bazemore, J. M., Augusta
Beard, J. S., Edison
Bender, John R., Winston-Salem, N.C.
Blumberg, C. N., Augusta
Blumberg, Joe M., Augusta
Browning, Zack C., Atlanta
Burns, E. C., Jr., Augusta

C

Calk, Guy L., Augusta
Carswell, Bowdre L., 20th Medical
Gr., Shaw AFB, S. C.
Cason, Wm. M., Atlanta
Clements, C. A., Daisy, Tenn.
Clements, J. L., Jr., Emory University
Counts, Russell L., Branford, Fla.
Coyle, J. A., Dublin

D

Daniel, Orman, Jeffersonville
Davis, Marvin L., Atlanta
Drummond, C. S., Winston-Salem, N.C.
Dyer, C. W., Macon

F

Finesinger, Jacob E., Baltimore, Md.
Flanagan, J. C., Atlanta
Freeman, M., Dublin

G

Gafford, A. V., Chamblee
Gilliland, Mary, Atlanta
Gordon, Joseph B., Fort Benning
Greenblatt, Robert, Augusta
Gude, A. V., Chamblee
Gustin, Ronald M., Athens

H

Hall, S. P., Scottsboro, Ala.
Harris, Marvin M., Ph.D., Macon
Harrison, J. H., Wrightsville
Harsha, James M., Chamblee
Hopkins, E. C., Augusta
Houston, W. H., Jacksonville, Fla.
Howard, John C., Chamblee

I

Irons, Ernest E., Chicago, Ill.

J

Jarrell, Harold, Macon
Jordan, T. C., Barnesville

K

Kay, James B., Jr., Augusta
Kelly, G. Lombard, Augusta
King, J. L., Jr., Atlanta
Kisselee, Paul J., Jr., Ft. Benning

L

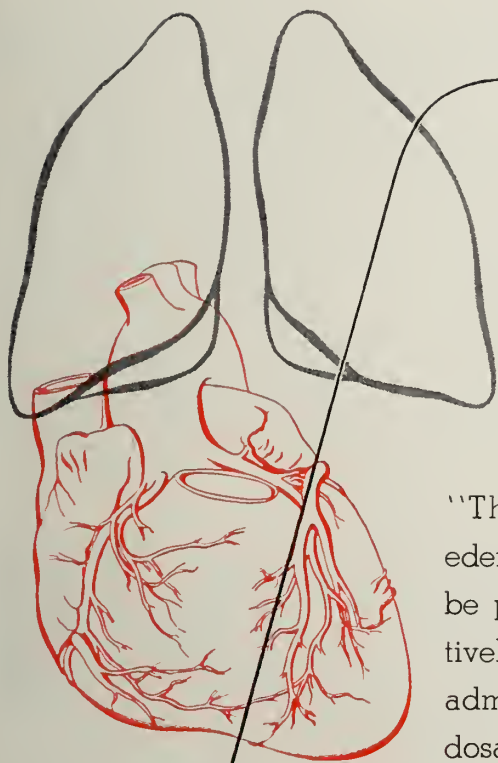
Levy, Jack H., Augusta
Lin, Hui-Ching Yen, Macon

M

Marvin, Chas. P., Atlanta
Matthews, W. Eugene, Augusta
Mayfield, George, Atlanta
McGinty, Howard C., Huntington,
W. Va.

Meissner, Tom O. W., Chamblee
Moffett, J. D., Jr., Atlanta
Moon, Jack B., Harlem

(Continued on Page XVI)



PULMONARY EDEMA AND PAROXYSMAL CARDIAC DYSPNEA

"The development of pulmonary edema at night may in certain cases be prevented and in addition effectively treated by intramuscular . . . administration of aminophyllin in dosages of 0.5 Gm."¹

The diuretic action of Searle Aminophyllin frees the tissues of excessive fluid; its myocardial stimulating action improves the efficiency of heart contractions.

G. D. Searle & Co., Chicago 80, Ill.



SEARLE AMINOPHYLLIN*

ORAL...PARENTERAL...RECTAL DOSAGE FORMS

*Contains at least 80% of anhydrous theophylline.

SEARLE RESEARCH IN THE SERVICE OF MEDICINE

1. Barach, A. L.: Edema of the Lungs, Am. Pract. 3:27 (Sept.) 1948.

REGISTRATION

(Continued from Page 228)

Mullins, James N., Atlanta

N

New, James S., Augusta
Nieburgs, H. E., Augusta

O

Ohnick, Herbert, Decatur

P

Parker, W. H., Daytona Beach, Fla.
Parks, Orville A., Augusta
Pitts, B. Marlin, Montevallo, Ala.
Pound, W. D., Eatonton

R

Ramey, C. W., McCalla, Ala.
Rey, Chas. J., Jr., Macon
Rinker, J. Robert, AugustaRivers, Thomas M., New York, N. Y.
Roberts, Ralph D., Macon
Roberts, R. E., Macon
Roche, W. P., Jr., Chamblee
Romeo, Charles J., Jr., Dublin
Rumble, Lester, Jr., Atlanta

S

Sams, W. C., Savannah
Sharpley, John G., Savannah
Schmidt, Henry L., Jr., Augusta
Smith, Claude A., Stockbridge
Smith, Wm. P., Jr., Macon
Stinson, F. C., Talbotton
Strickland, M. A., Chamblee
Sullivan, A. W., Chamblee

T

Tate, Allen D., Jr., Macon
Thigpen, Corbett, Augusta
Thomas, W. M. H., MaconTorpin, R., Augusta
Turner, August B., Atlanta

V

Valencia, Nacioucen, Augusta
Volpitto, Perry P., Augusta
Waddell, N. N., Anderson, S. C.
Wannock, Hoke, Augusta
Watkins, W. M., Macon
Webb, W. M., Ft. Benning
Weens, H. S., Emory University
Williams, P. L., Jr., Cordele
Willis, Augusta E., Chamblee
Wood, James A., Macon
Woodward, Louie Frances, Augusta
Wylie, M. H., Augusta

Y

Yeomans, Neal F., Augusta
Young, Geo. G., Chattanooga, Tenn.
Youngblood, V. H., Concord, N. C.

WANTED—Young man, general practitioner, in West Middle Georgia, Georgia License required. Will guarantee \$6500.00 first year, possible to make \$10,000 to \$12,000. Write or contact MAG, 478 Peachtree St., N. E., Atlanta, Ga.

LONG established hospital for immediate sale in South Georgia—Surgeon in charge retiring. Well equipped and fully accredited by College of Surgeons. Nurses home and doctors' apartments joining hospital. Contact Journal Medical Association of Georgia, 478 Peachtree St., N. E., Atlanta, Ga.

There is never a substitution in . . .

LANE *filled* **PRESCRIPTIONS**

LANE Registered Pharmacists, conforming always to the rigid ethics of their profession, use meticulous care in the compounding of Prescriptions entrusted to their care.

Lane large buying power and rapid turnover make it possible to keep on hand at all times, for your protection, fresh, potent drugs for the compounding of the simplest as well as the most intricate Prescription. Pharmaceuticals from . . .

World famous manufacturers whose names mean outstanding excellence in the manufacture of ethical medicines

LANE *Rexall* **DRUG STORES**

THE JOURNAL OF THE *MEDICAL ASSOCIATION OF GEORGIA*

PUBLISHED MONTHLY under direction of the Council

Vol. XXXIX

Atlanta, Georgia, June, 1950

No. 6

MEDICAL SERVICES IN THE DEPARTMENT OF DEFENSE

RICHARD L. MEILING, M.D.

Director of Medical Services, Office of the
Secretary of Defense
Washington, D. C.

It is always a pleasure to return to Georgia—and especially so when I can join my medical colleagues to discuss our mutual interests in national defense. Of all the things which I might say to you tonight, probably the most important is this matter of mutual understanding and effort between military and civilian physicians on defense problems.

Today the conflicting philosophies of nations, in combination with the headlong rush of science, have forced this country, against its natural wishes, to arm itself against the threat of an aggressor. Such threats we have faced and mastered in the past. The challenge to our national security today has assumed a new character.

Should our nation again be attacked, the battle may well be carried to our own cities and towns rather than being contained on some distant shore. The nation will look, not alone to the military forces, but to the medical profession of our country for a broad and effective medical defense program—one which will meet the needs of the entire population, military and civilian. For this reason, the present and future plans for medical services in the Armed Forces are your business as much

as they are mine—a joint responsibility shared by every physician in our country.

For many of our military medical problems, we have little or no precedent. Because of this, we have gone to the medical profession as a whole for guidance and assistance, since the job before us requires the finest talent the nation can muster.

The Office of Medical Services, and the Department of Defense health policies which it has developed, are the product of the thinking of dozens of the best professional men of this country.

The American medical profession repeatedly recommended to the President, the Congress and the Department of Defense the development of civilian medical advice and direction over the medical services of the armed forces.

You are all familiar with the work of the Council on National Emergency Medical Service of the American Medical Association. No one person had more to do with the establishment and work of this Council than your own beloved Dr. James Paullin. In June 1948 the House of Delegates of the American Medical Association adopted a resolution calling for the establishment of "a permanent 'Civilian Medical Advisory Board' " of civilian doctors of medicine responsible for developing policies, procedures and programs for the medical and hospital services throughout the Armed Forces. Full thought and consideration were given by the medical profession to the consolidation or joint utilization of military medical facilities by all the Armed Forces, with due emphasis on the medical support of the combat forces,

and to the resulting reduction of non-military medical problems. These measures were designed to alleviate shortages of professional medical personnel and to give the greatest possible support to the fighting forces.

Each of these recommendations from the medical profession has been proven worthy and hence has been accepted.

The advisory body was established in November 1948 when the Secretary of Defense, the late James Forrestal, appointed the Armed Forces Medical Advisory Committee. This committee, under the chairmanship of Mr. Charles P. Cooper, is composed of outstanding civilian physicians and dentists who advise the Secretary of Defense on broad military health policies.

The Secretary of Defense, on March 1, 1949, instructed the Secretaries of the Army, Navy and Air Force to take all possible measures to reduce the non-military medical workload and to improve the utilization of professional manpower throughout the Armed Forces.

The first step toward consolidation of hospital facilities was a Department of Defense policy for joint inter-service use of military hospitals. This was followed in March 1949 by a policy of joint staffing of selected hospitals, to further conserve specialized medical talent.

In May, 1949, on the recommendation of the Armed Forces Medical Advisory Committee, Secretary of Defense Louis Johnson established a Medical Services Division, which later was redesignated the Office of Medical Services. This step likewise was welcomed by the American medical profession which, in July 1949 and January 1950, through the House of Delegates of the American Medical Association, forwarded letters to the Secretary of Defense commending the establishment of

the Office of Medical Services and the appointment of the civilian director of Medical Services on the Secretary of Defense staff.

In short, the present medical organizations and policies at the level of the Secretary of Defense conform to the actual recommendations of the American medical profession. They constitute the results of the best medical thinking in this country.

We in the Department of Defense consider this important. We realize that our true mobilization strength lies with the civilian physicians of our nation. In World War II approximately 95 per cent of the medical officers serving with the Army and Army Air Forces were civilian medical men in uniform. Some 86 per cent of the Navy's medical staff likewise were civilians on wartime duty. The splendid record of the greatest and most successful medical team in history bespeaks more than words of mine the far-reaching advances made in medical and health fields. The civilian-military medical officers certainly have earned a place at the conference table when medical plans for national defense are being formulated.

You probably are interested in the current economy program of the Department of Defense and its effect on the military medical services. In a nutshell, it amounts to this: "How can we place the greatest number of tanks, ships and planes in service and stay within the discipline of a vigorous national economy?" The military medical services must assume their fair share of these economy efforts, so long as the high quality of medical care which the American people expect for their uniformed forces is not impaired. On the basis of this principle, we have been able to achieve many economies and we look forward to more.

But in providing medical services for

the vast needs of the Armed Forces, economy of dollars alone is neither the goal nor the solution. We had to pursue economy in five forms—economy of dollars, of facilities, of talent, of effort and of time. There is no inexhaustible supply of any of these items. Unless each is carefully used we cannot hope to meet our obligations to the military forces.

In many instances the dollar economies have come as a by-product of introducing modern, sensible business practices. For example, if you were to ask me today for the cost of health services in the Armed Forces, I cannot tell you—nor can anyone else. This is the result of budgeting and accounting methods in which the funds necessary for medical and related care have been dispersed throughout many branches of the three military departments, with only a small part of the money labeled for the “Medical Services.”

Therefore, the budgeting system is being revised—modernized if you will! During the next fiscal year we will know for the first time just how much money our military establishment needs and spends for the health programs.

The physical facilities which the military medical services now have are the most generous which the nation has ever provided in time of peace. We propose to use them wisely. Using them jointly, as I mentioned a moment ago, is exceedingly important and has proved very satisfactory in operation. It is only a matter of education before even the “diehards” will accept it. The facilities for transportation of patients have been carefully studied also. The Department of Defense last September adopted the policy of using air transportation as the standard method of transporting patients, both in this country and for patients returning from overseas. This results in saving dollars and scarce medical personnel; it simplifies the

logistics of military operations by utilizing planes which otherwise would be returning empty, in most instances, to their home bases; and it improves the care of our patients by their rapid movement to the best qualified medical facility.

Joint staffing in the Army, Navy and Air Force hospitals with specialists and consultants who are in short supply will make possible a better professional service to patients of all three services with the talent available and with the least drain on the national medical resources.

Our medical reserve program during the past three years has been far from satisfactory, either to the reservist or the military forces. Recognizing this, the Armed Forces Medical Advisory Committee established a special task force of reserve officers to investigate the problem thoroughly, hearing testimony from dozens of informed individuals and organizations, military and civilian. The Task Group’s proposals for improving the medical reserve were adopted by the committee and now are in the hands of the Civilian Components Policy Board, which coordinates reserve affairs for the Office of the Secretary of Defense. I sincerely hope that this study will produce a major improvement in the medical reserve program, for no mobilization plan can be successful in a democracy such as ours except through a sound reserve program.

We are seeking economy of effort by concentrating on the work for which the military medical services hold prime responsibility. It means, for example, devotion to the requirements of the combat arms, with other activities taking a secondary role. It means, in research, concentration of our efforts upon the research for which we have the principal obligation. We cannot afford to duplicate the research work of other federal agencies or private institutions, or, for that matter, of the

friendly nations with which we are allied under the Atlantic Pact. In the scientific race which characterizes the military efforts of nearly all nations today, the limited number of trained research workers and the amount of equipment available for certain investigation demands that we cooperate with others and apportion the work according to the mission which is assigned to each. To do this the Research and Development Board and the Office of Medical Services review the research plans of the military medical services regularly.

The need for conserving time brings us to a critical part of our defense problem. Should we be attacked again it would be necessary to mobilize much faster than ever before, and probably under conditions of considerable disruption. For this reason, our plans must be up-to-date from day to day, particularly among the medical services, for the demands which would be made upon us overshadow any of our previous experience.

When I say "us" I mean you and me and every physician in the country. Our nation looks to the medical profession in time of national emergency, just as our patients and their families turn to us individually in time of need. Therefore it is only right and proper that we should join hands in preparing our defenses. As long as our Armed Forces have the advice, the participation and the support of physicians throughout the land, I feel confident that this country will be medically ready for any emergency which arises.

HEALTHGRAM

The increase in facilities for distribution of necessary food, the more widely spread knowledge of the principles of healthful living, better understanding of good housing and the leveling off of income, with few rich and few poor, have been, and will continue to be, important factors in the prevention of incidence of and death from tuberculosis. Unless a world-wide catastrophe interferes, it seems clear that social factors will continue to favor reduction rather than increase of tuberculosis. W. G. Smillie, M.D., New England J. Med., Jan. 12, 1950.

INTRAMEDULLARY NAILING OF FRACTURES OF LONG BONES

J. C. PATTERSON, M.D.

Cuthbert

This method of fixation of fractures by driving a large pin down the medullary canal has a great many advantages in selected cases over the old methods. It is an internal splint which holds the fracture in perfect position, yet allows the muscle pull to keep up continuous impaction of the fragments and thus stimulates union.

Although Leslie V. Rush, of Meridian, Mississippi, first used pins in the medullary cavity to hold fractures and published his first paper in *Bone and Joint Surgery* in 1937 and in *Annals of Surgery* in 1939, most writers on this subject have given credit to Kuntscher, of Kiel, Germany, who published his classic paper in 1940. He and a number of surgeons in Germany, Hungary, and Sweden used this method quite extensively, and probably too indiscriminately, during World War II.

For some reason Rush's work seemed not to have been well known, and due to lack of communication between the central powers and the rest of the world little was known of this method in this country.

It took the recapture of one of our soldiers in whose femur a Kuntscher pin had been placed to introduce American surgeons to this procedure, and the general public was made aware of this method of treatment by an article in *Time Magazine* showing photographs of the x-ray of the above mentioned soldier. Since that time there has been a number of articles written with case reports published both here and abroad, the

This or essentially the same paper with slight modification has been presented before the Seaboard Airline R. R. Surgeons' Meeting, Havana, Cuba, and before other smaller groups in the past few months, all with the hope the profession would enlarge its activities regarding the use of the Rush pin and further perfect the technic for improved surgical care for fractures.

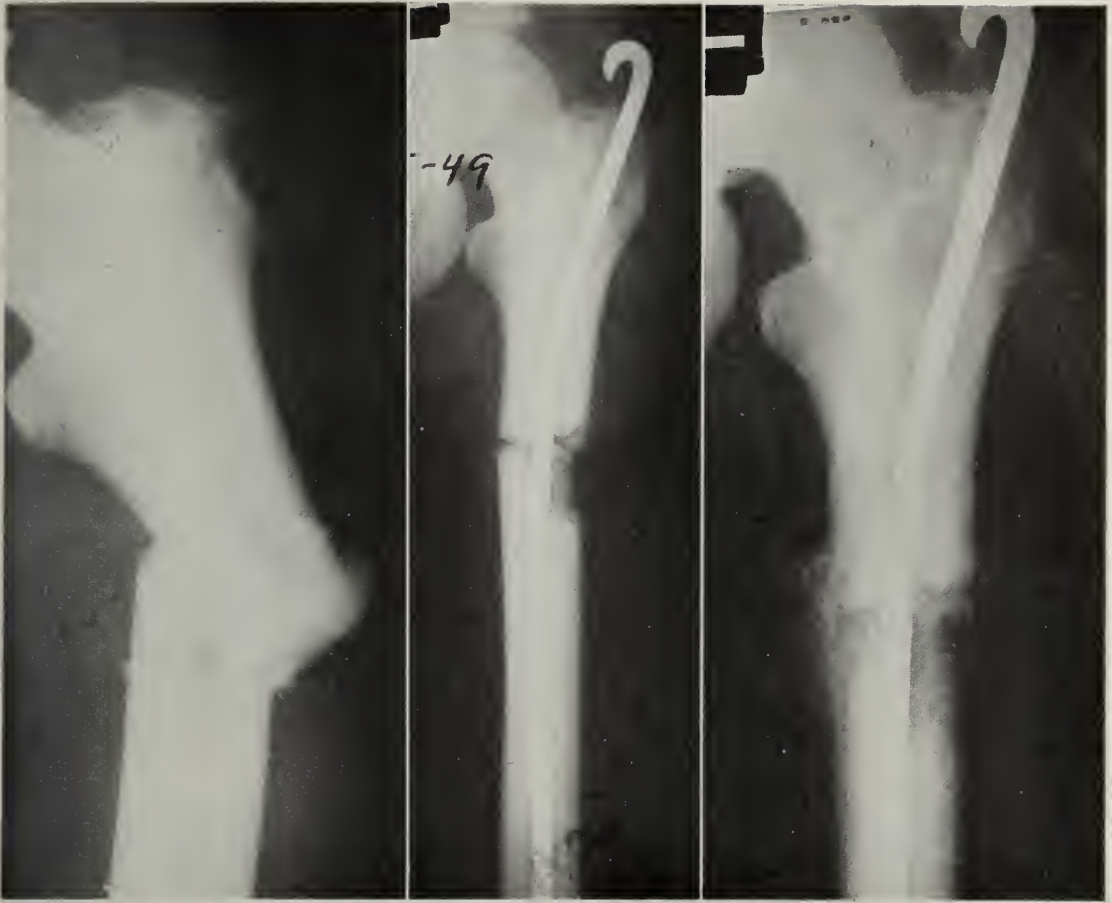


Fig. 1a. Fracture. Case 1.

Fig. 1b. Immediately after reduction and insertion of Rush pin. Case 1.

Fig. 1c. Six weeks after insertion of pin. Walks without support. Case 1.

writers most prominently known being: Anders Westerborn, of Sweden; Endre Kedri, Budapest, Hungary; Fowler and Riordan, of Nashville, Tennessee; Hanson and Street, of Mississippi; and Leslie V. Rush, of Meridian, Mississippi. Most of these men have confined the use of the nail to fractures of the femur; however, Rush has used the nail in fractures of almost all the bones of the body.

There are three types of nails: the 'V' type, a very rigid type of nail used by Kuntscher; the diamond-shaped rigid bar of Street; and the round, more flexible nail invented by Rush. I had the pleasure of visiting and observing Dr. Rush use his nail. In my work I have used only the Rush nail and technic. All of these nails are made of

18.8 stainless steel.

At first Kuntscher drove his nail in rather blindly through the greater trochanter, reducing the fracture, and threading the nail into the lower fragment by the use of the fluoroscope. He has since abandoned this method, and now he makes an incision over and exposes the site of the fracture. He then inserts a guide wire retrograde through the medullary canal of the proximal fragment. This wire is pushed through the cancellous portion of the bone until it is exposed just beneath the skin. A small incision is then made over the wire and the 'V'-shaped nail threaded over the wire and driven down, threaded into the distal fragment, then driven all the way.

The Rush method is as follows: first

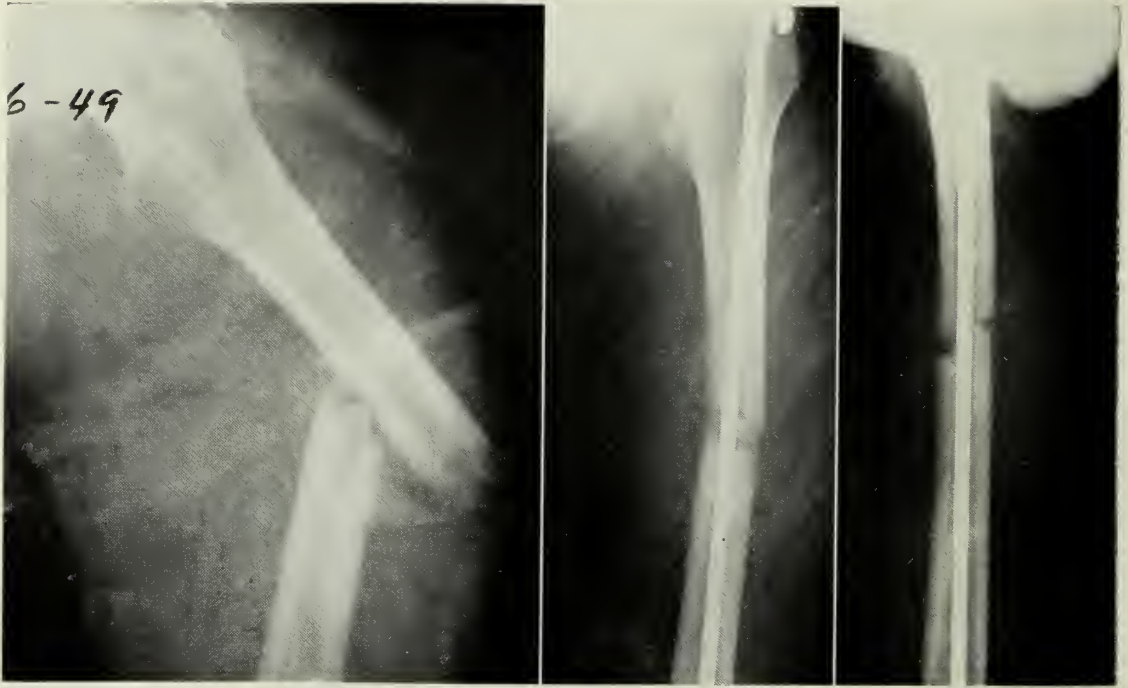


Fig. 2a. Fracture. Case 2.

Fig. 2b. Immediately after reduction. Case 2. Note this and Fig. 2c, which is a different view, but films were made at same examination. Case 2.

Fig. 2c. Note comment under Fig. 2b. Case 2.

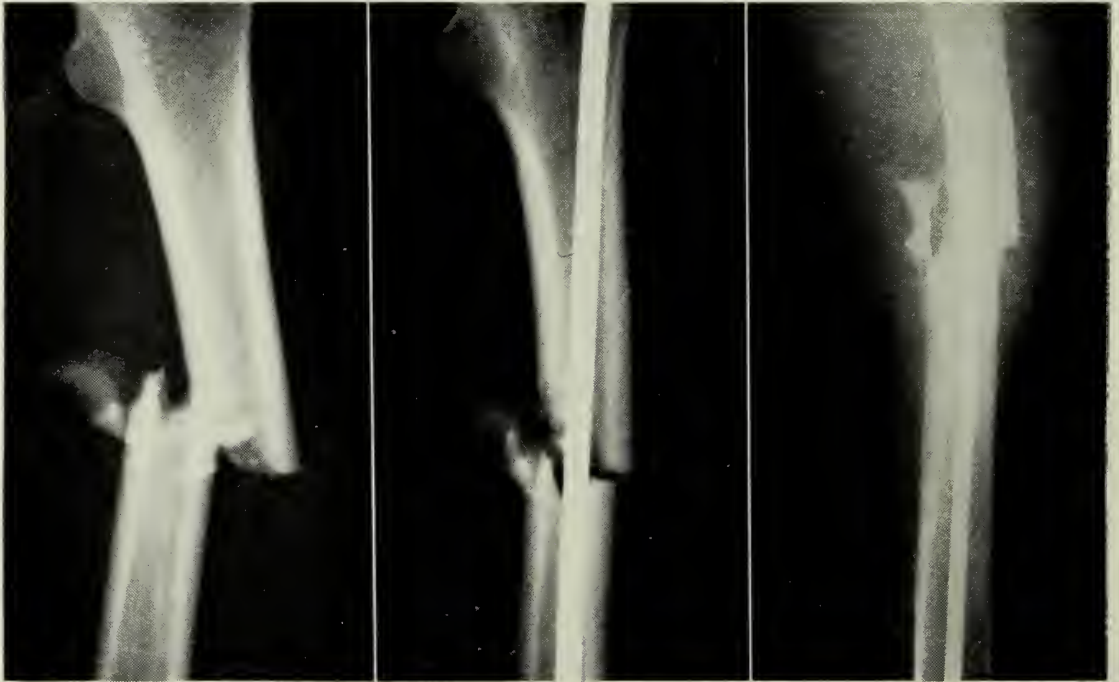


Fig. 3a. Fracture. Case 3.

Fig. 3b. After insertion of pin. Case 3.

Fig. 3c. Six weeks after insertion of pin. Case 3.

choose the right size and length nail by measuring it on an x-ray film of the well leg, remembering that x-ray magnifies the size of the canal about 1 mm. Next a two

or three inch incision is made over and down to the greater trochanter; then either inside the trochanter or just beneath, it does not matter, a hole is bored with a large brace



Fig. 4a. Shows loose plate with distraction, 6 months old. Case 4.

Fig. 4b. Plate was removed and pin inserted. Case 4.



Fig. 4c. This and Fig. 4d show results after treatment with Rush pin. Case 4.

Fig. 4d. Note comment under Fig. 4c. Case 4.

and bit through the cortex of the bone down toward the medullary cavity. Then a Rush nail, which has a sled runner point and may be bent easily, if necessary, is inserted into the hole and driven until one can feel that it is in the medullary canal. Another incision is made over the site of the fracture, the fracture is reduced, and is held by an assistant with bone forceps while the nail is driven down and threaded into the distal fragment under direct vision, the pin is then driven until about two inches above the joint. Wounds are closed and no other apparatus is necessary to restrain the limb. The patient is allowed out of bed in a few days, up on crutches and out of the hospital in less than two weeks, allowing movement of the knee almost immediately, and one can usually bear weight on it in six weeks. This is in marked contrast to the usual patient—from six to eight weeks in traction, six to eight weeks longer in a spica cast, a stiff knee, and several weeks before one is able to walk without a cane. After firm union is determined by x-ray, usually several months, the nail is removed.

The indications for the use of the nail

are rather limited. The ideal type of fracture for its use is a transverse fracture of the upper two-thirds of the femur, but it must be one inch below the trochanter. I have used this nail only in fresh fractures and in a few old ununited fractures, but the indications of its use as given by men of wider experience are: first, femoral shortening; second, malunion of fractures; third, ununited fractures; fourth, fractures which do not reduce satisfactorily with traction, which should be operated on in any event; fifth, double fractures of the shaft of the femur; sixth, fracture in which early mobilization is essential, such as fractures complicated by joint injuries.

Contraindications: First, long spiral fractures; second, comminuted fractures; third, large butterfly type fractures.

These three types of fractures are contraindicated because the pull of the strong muscles of the thigh will have a tendency to telescope the fragments and thus produce shortening unless one uses traction at the same time; fourth, some men consider compound fractures a contraindication because of the danger of infection, while others argue that chemotherapy obviates danger of

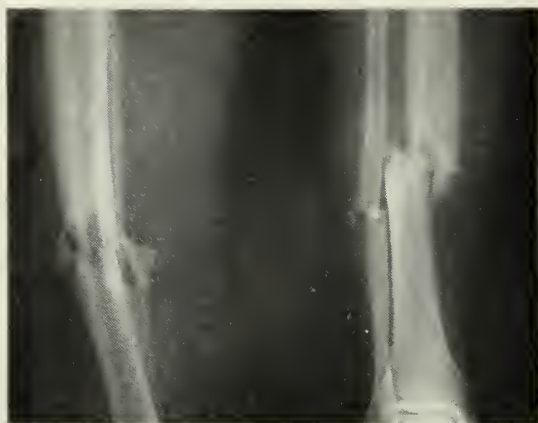


Fig. 5a. Malunion of tibia, Case 5.

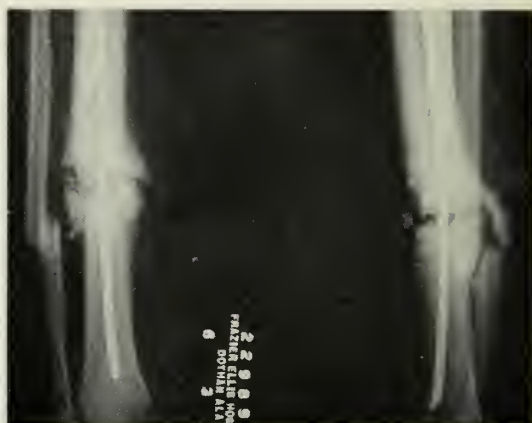


Fig. 5b. Bone was freshened and pin inserted, Case 5.

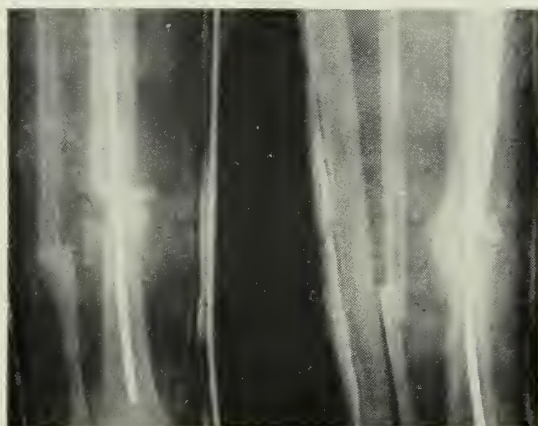


Fig. 5c. Note results after six weeks elapsed, Case 5.

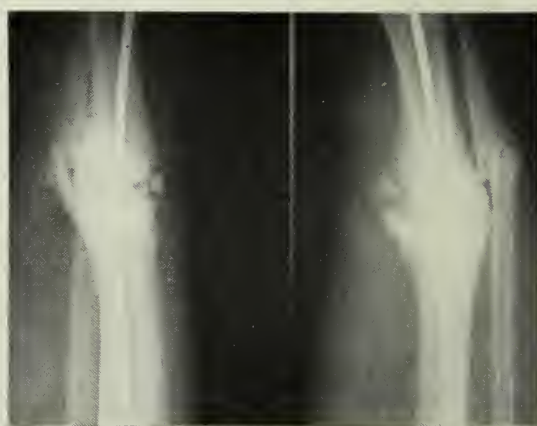


Fig. 5d. Note results after approximately eight months had elapsed, Case 5.

infection; fifth, in children under sixteen in whom the epiphyses are not closed this method should not be used.

Advantages: No external fixation is necessary in fractures of the tibia in which eversion of the foot will occur unless a cast is applied to the leg; second, the adjacent joints can be kept mobile, preventing limitation of motion; that is, the stiff knee which is so common with the old method of treatment; third, early ambulation, thereby reducing hospital cost and nursing service; fourth, there is no muscular atrophy and no joint stiffness; therefore no rehabilitation is necessary. This method eliminates the detrimental factors of traction or distraction at the site of the fracture, but maintains through muscular action constant pressure on the ends of the fragments, which stimu-

lates healing.

One must consider the theoretical dangers of this method such as, the effect caused by a foreign body closed in a medullary space: first, as to sequestration and development of callous. Unless there is an infection no sequestration or fistula will develop. Since the advent of chemotherapy very few infections, if any, have been reported. Rush claims that he has not had an infection in twelve years from work of this type. X-ray films show that ossification of the ends of the fragments is perfect. Second, the danger of fat embolism. It is claimed that there is less danger of fat embolism from the use of the pin than from the original fracture, although Kuntscher reported two cases of fat embolism. Third, the effect of operation on the marrow as a blood forming organ. Kedri,

by doing blood examinations every five days from the day of the fracture until six months afterwards, stated that the hemoglobin and red cell count increased from ten to thirty per cent, indicating that it actually stimulated the blood forming organs. Fourth, the possibility and sequences of infection. In Europe, early in the use of the pin where it was indiscriminately used there was some infection. Kedri reported four out of 82 cases. These were in compound wounds, but none since the advent of penicillin, and I have known of none in this country.

Conclusions: Because of the short stay in bed, the simple after-treatment, the reduced pain, the lack of stiff joints, the short hospital stay and early return to work, I feel that this is the best method available today of treating the type of fractures in which it is indicated.

REFERENCES

1. Rush, L. V., and Rush, H. L.: A Reconstruction Operation for Comminuted Fractures of the Upper Third of the Ulna, *Am. J. Surg.*, New Series vol. 38, 2: 332-333 (Nov.) 1937.
2. Rush, L. V., and Rush, H. L.: Technique of Longitudinal Pin Fixation of Certain Fractures of the Femur, *J. Bone and Joint Surg.* 21: 619-626 (July) 1939.
3. Kuntscher, G.: Intramedullary Nailing: Experimental Study, *Klin. Wchnschr* 19: 6-10 (Jan. 6) 1940.
4. Street, Hansen, and Brewer: The Medullary Nail, Presentation of a New Type and Report of a Case, *Arch. Surg.* 55: 424-432 (Oct.) 1947.
5. Westerborn, A: Marrow Nailing of Recent Fractures, Pseudarthrosis and Bone Plastic. Experiences in 100 Cases, *Ann. Surg.* 127: 577-591 (April) 1948.
6. Bohler, L.: Medullary Nailing of Kuntscher, First English Edition, Baltimore, Williams and Wilkins Company, 1948.
7. Fowler, S. Benjamin, and Riordan, Daniel C.: Internal Fixation of the Femur with the Kuntscher Intramedullary Nail. *South. M. J.* 42: 545 (July) 1949.

HEALTHGRAMS

Tuberculin tests are an assential part of preventive services to children, both to indicate whether infection has occurred and to direct attention to sources of infection. The increasing interest in BCG vaccine may lead before long to its wide use in minimizing the probability of the development of clinical tuberculosis. Henry E. Meleney, M.D., The Milbank Memorial Fund Quarterly, July, 1949.

* * *

If the public health man knows all there is to know about tuberculosis, its cause and prevention, its epidemiology, case finding, contact finding, and supervision, its health education and community organization aspects, its hospital and rehabilitation phases, its economic reactions, its need for statesmanship and legislation, its challenges in unanswerable questions and the need for research, that person knows the bulk of what there is to know about public health. The rest of public health is largely application of the same procedures in other fields with changes of emphasis according to the special peculiarities of that field. William P. Shepard, M. D., *Nat. Tuberc. A. Bull.*, Oct., 1949.

AMBULATORY TREATMENT OF SYPHILIS WITH AUREOMYCIN

C. H. CHEN, M.D.,
R. B. DIENST, Ph.D.,
and
R. B. GREENBLATT, M.D.
Augusta

Reports on the oral administration of aureomycin in the treatment of various stages of syphilis have appeared during the past two years.^{1 3} All investigators have obtained satisfactory results with the antibiotic given every four to six hours day and night (q4h to q6h) for 11-25 days. The purpose of this study was to see if the one to two night doses could be omitted without impairing the desired clinical results. The success of this regimen will make this form of therapy more convenient and fully ambulatory.

For this study two patients with primary chancre, one with a negative and one with a positive Kahn test, were selected. Each patient was given one gram of aureomycin in the form of four 250 mg. capsules four times daily at four hour intervals (q.i.d.) for two weeks. Their case histories are briefly outlined as follows:

REPORT OF CASES

Case 1. A Negro male, aged 21 years, came to the clinic with the chief complaint of having had a painless ulcer on the penis for six days. The patient denied having had syphilis previously, and a blood Kahn test performed three weeks previously was negative. Local examinations revealed a well circumscribed, elevated and indurated ulcer measuring 1.5 cm. in diameter in the right inguinal region. Darkfield examination of the ulcer was positive for *T. pallidum*. Kahn, Ducrey, Frei and Donovan body⁴ skin tests were performed and when read were found to be negative.

Oral aureomycin treatment as outlined was begun immediately. Within four days the ulcer healed completely. No drug reactions were noticed. Blood Kahn tests done after one, two, four and five months were all negative. The patient remained in perfect health during a follow up period of five months.

Case 2. A Negro male, aged 17 years, complained of a penile ulcer of "few days" duration. There was some tenderness but no pain. Four years ago he had an attack

Received for publication March 23, 1950 from the University of Georgia School of Medicine, Augusta, Georgia. Aided by a grant from the State of Georgia Department of Public Health.

The aureomycin capsules used in this study were furnished by Lederle Laboratories, Inc.

of gonorrheal urethritis, but had never had syphilis. His blood Kahn tests had been negative. On examination, a typical hard and indurated chancre of 1.5 cm. in diameter was seen on the right side of the coronal sulcus. There was no enlargement of inguinal lymph nodes, nor was there any other abnormal finding. Darkfield examination and Kahn test were both positive, while Ducrey, Frei, and Donovan body skin tests were negative.

A two-week course of aureomycin was given. On the second day tenderness disappeared, but the lesion was only slightly improved. On the tenth day a darkfield examination was made and no treponema were found. The patient then complained of nausea, some vomiting, profuse salivation, headache, diarrhea, and insomnia. There was also a slight elevation of body temperature. Benadryl 50 mg. three times a day and phenobarbital 0.03 gm., p.r.n., were prescribed. All complaints were completely alleviated the next day except diarrhea which lasted throughout the aureomycin therapy. Complete healing of the ulcer took place three weeks later. A blood Kahn test done four months after the completion of therapy was negative. No skin eruptions or other lesions suggestive of secondary syphilis developed during the four months of follow up period.

Discussion

From the results obtained in these two cases, it appears that aureomycin is effective against primary chancres when administered in the daytime hours only. The healing of the ulcer in the second case was delayed, probably due to the presence of phimosi. The fact that the darkfield examination was negative long before the lesion completely healed indicated that the cause of delayed healing was probably mechanical.

The belief that a supermultiple dosage schedule for crystalline penicillin G is necessary has been questioned by Southworth and Debbs.⁵ They obtained equally good clinical results whether every 12 hours or the conventional every three hours schedule was employed. Since aureomycin is slowly excreted,⁶ there is less indication for this antibiotic to be given throughout the night. The results from this study attest to this reasoning. Although other forms of syphilis have not been treated with our proposed four-times-a-day schedule, it is our belief that satisfactory results might be obtained.

Summary

Two cases of primary chancre were successfully treated with aureomycin given in 1 gram doses four times daily (q.i.d.) for 2 weeks. Since this schedule does not involve

the administration of medicine at night, it is considered more convenient than other schedules thus far reported and is probably the first suitable ambulatory treatment for syphilis. The same method of aureomycin administration is recommended for a trial in other forms of syphilis.

REFERENCES

1. O'Leary, P. A., and Kierland, R. B.: The Oral Administration of Aureomycin (Duomycin) and its Effects on Treponema Pallidum in Man, Proc. Staff Meet., Mayo Clin. 23:574-578 (Dec. 8) 1948.
2. O'Leary, P. A., and Kierland, R. B.: The Oral Use of Aureomycin in the Treatment of Late Cutaneous Syphilis, Proc. Staff Meet., Mayo Clinic 24: 302-306 (May 25) 1949.
3. Rodriguez, J.; Plotke, F.; Weinstein, S., and Harris, W. W.: Aureomycin and its Effect in Early Stages of Syphilis: A Preliminary Report, J.A.M.A. 141: 771-772 (Nov. 12) 1949.
4. Chen, C. H.; Dienst, R. B., and Greenblatt, R. B.: Skin Reaction of Patients to Donovan's Granulomatus, Am. J. Syph., Gonorr. & Ven. Dis. 33: 60-64 (Jan.) 1948.
5. Southward, J. L., and Debbs, C. H.: Prolonged Interval Dosage of Aqueous Penicillin in Surgical Infections, South. M. J. 42: 981-983 (Nov.) 1949.
6. Herrell, W. E., and Heilman, F. R.: Aureomycin, Studies on Absorption, Diffusion and Excretion, Proc. Staff Meet., Mayo Clinic 24: 157-166 (March 30) 1949.

NURSE MIDWIFE SERVICE IN WALTON COUNTY GEORGIA

ERNEST THOMPSON, M.D.

Walton County Health Commissioner
Monroe

Nurse midwife service is a new venture in Public Health in Georgia, and in fact in the nation. Because it is new and because it is necessarily closely allied to the practicing physician, the program committee thought it appropriate to have a paper on nurse midwife service read at this meeting.

My discussion begins with a definition of the term *nurse midwife*. A nurse midwife is a graduate nurse who has had postgraduate training in the management and delivery of normal obstetric cases. By this training she is qualified to deliver normal cases and is capable of early recognition of complications which demand the services of a physician.

I shall try to give in a short space a description of the organization and operation of the program, and to discuss briefly the need for such a service; the relations of the Health Department with the public, the

doctors, and the hospital; and the possible future of the service.

Since January 1, 1938 Walton County has had a Health Department under the direction of a full-time Health Commissioner who is a Doctor of Medicine. Since January 1947 the County Health Department has employed two nurse midwives whose primary duty is to attend deliveries of patients qualifying for nurse midwife service.

These deliveries are all done at the hospital. The nurse midwives do not attend home deliveries. The patients are hospitalized for three days, longer if complications require it. The total cost to the patient is a hospital charge of \$15.00. This is the same as the fee charged by lay midwives.

To be eligible for this service the patient must be a resident of Walton County, the case must present no serious complications, the patient must be investigated by the local Department of Public Welfare, an admission card must be signed by a Walton County physician, and the patient must attend the Health Department's maternity clinic for prenatal care.

The Health Commissioner is responsible for prenatal care but does not attend deliveries. Every doctor in the county stands ready to assist in emergencies.

The nurse midwives perform another very valuable service. They are called when doctors' private obstetric patients come to the hospital in labor. They examine the patient, observe the course of labor, notify the doctor at the proper time, and assist the doctor with the delivery. Obviously they represent a valuable addition to the hospital personnel and constitute a great time saver for the doctor.

The nurse midwives are regular employees of the County Health Department which is responsible to the County Board of Health. The State Department of Public Health stands in the same relation to this

service as to other Health Department services; they furnish financial participation. They are concerned in the formulation of policies governing the program. They assure themselves and us that the nurse midwives employed are capable and that the whole program maintains a high standard of performance. They observe the work at frequent intervals and are ready at all time with expert assistance in any of its many phases. They require regular, detailed reports.

The foregoing describes in brief the nurse midwife service as operated by the Health Department in Walton County. The need for such a service in Walton County and over much of the State is attested by undeniable facts. Lay midwives, or "granny women", are disappearing from the scene in Georgia. There are now 1600 lay midwives in the State. One thousand of these are from 50 to 70 years of age. More than 300 are above 70. Less than 250 are below 50.

Ten years ago Walton County had 16 registered midwives; we now have seven. Two of these are 48 years of age; one is 58; three are respectively 63, 64, and 69, and one is 70.

Midwife patients are not disappearing however. A large number of our mothers still must of economic necessity seek the services of midwives. There are of course a small number who employ midwives from choice rather than necessity.

It is true also that the quality of obstetric care in our State is improving. This improvement in quality (which carries with it an increase in quantity of service per patient) entails an increase in doctors' fees, and more and more is coming to mean a hospital bill in addition to a doctor bill.

This is as it should be; and I, and all health workers, encourage the employment of a good physician, adequate pre- and post-

natal care, and hospital delivery if a good hospital be reasonably available. Furthermore we affirm that such service costs money and is worth what it costs. However, those who cannot pay for such service constitute a problem; and because human life is important the problem cannot be ignored. Nurse midwife service is an attempt to solve this problem.

There are five separate groups involved in the operation of this program, these being the State Department of Public Health, the Walton County Health Department, the practicing physicians of Walton County, the Walton County Hospital, and the public whom we serve. Obviously the enterprise had to be carefully planned and plans carefully followed through in order to do a good job and preserve harmony between the various groups.

Before the work was started every phase of it was considered and so far as possible everything was put in writing and received the mutual approval of the groups involved. On one occasion the members of the Walton County Medical Society sat up until midnight, hearing the reading of six pages of policies, two pages of questionnaire to individual doctors concerning their personal preferences in their own obstetric practices, and twenty pages of standing orders for nurse midwives. We tried to anticipate and plan for all situations: even whether or not the nurse midwives would live in the nurses' home at the hospital. (Incidentally it was decided that they would not).

This careful planning was not wasted effort. The program has operated for two and half years with one amendment to the policy on admission of patients to the service, and one alteration of administration of the same policy. Both these changes were initiated by the physicians of the county. Furthermore, all parties concerned, including the people of the county, agree that we

are performing a worth while service and are doing it in the right way.

A few remarks on admission policies may be of interest. In the first place I point out that pre- and postnatal care at the Health Department's maternity clinic, is available to residents of Walton County without regard to financial status. This service was established in the early days of the Health Department to take care of patients of lay midwives. By far the greater number of women seen in this clinic are midwife patients, but quite a number come to us for prenatal care and go to their doctor for delivery, and this on order of the doctor himself.

When we established delivery service by nurse midwives, then of course the patient's financial status became a consideration. In the beginning it was agreed that patients whom we considered eligible and who presented no serious complications, would be sent with an admission card to the doctor whom she named as her family physician. If the doctor signed the card and returned it to us the patient was admitted to the service. If he refused to sign the card the patient was denied the service.

After the program had been in operation for seventeen months the doctors proposed to amend admission policies to require investigation of applicants by the Welfare Department. This was done. Now the patient goes to the doctor with a summary of her financial condition as drawn up by the Welfare Department and a recommendation for acceptance or rejection signed by the Welfare Director. The doctor is not bound by the Welfare Director's recommendation. He still may accept or reject the patient as he sees fit.

Our admission policies are satisfactory I believe, except for a few people on the ragged edge of eligibility, who could perhaps stretch a point and employ a doctor,

but cannot be persuaded to do so. When these people are denied the service they employ "granny women" and have their babies at home. Since we cannot send them to doctors I feel that we should admit them to nurse midwife service. Some of the doctors agree with me on this and some do not. It will not be done until the doctors are agreed on it.

Any such program as this succeeds or fails accordingly as the local Health Department succeeds or fails to establish and maintain cordial relations with the practicing physicians and the hospital. I say, with no modesty whatever, that we have succeeded in this and will continue to succeed.

In the first place our nurse midwives are well prepared: their work earns the respect of the doctors and of the hospital management and personnel. And they are on the job. One of them is on call 24 hours a day, holidays, Sundays, every day. There has not been a time since the program started when a nurse midwife could not be found in a very few minutes.

In the second place, the nurse midwives, and I, and the whole Health Department, walk the straight and narrow path of doing our own job and preserving strict neutrality in dealing with the several members of the profession. We make no attempt to operate the hospital or to manage any doctor's practice. This is not to say we never make a suggestion. We do make suggestions and they are always well received and given due consideration. We are in competition with lay midwives but we are not in competition with doctors. We send patients to doctors whenever we have the opportunity.

In the third place, our doctors are easy to get along with. A more cordial and cooperative group of doctors would be impossible to find. If they harbor the least ill will toward the service or consider it in any way a threat to their practice, I have been

unable to discover it.

In the matter of cooperating with the nurse midwives and assisting them with their patients, the doctors have gone beyond what could reasonably be expected. They have done literally everything from prescribing a sedative to performing a cesarean section, and have made no charge for such services. In several instances they have performed sterilizing operations on nurse midwife patients whose general health did not permit further childbearing. These operations were also done without charge.

We receive the same fine cooperation from the hospital. They always deal very cordially with us and very generously with the patients.

Nurse midwife service is proving popular with the public. In 1947 nurse midwives attended a total of 64 births, in 1948 they attended 80 births, through July 31 this year they attended 76 births. All their deliveries are hospital deliveries, and I believe the percentage of hospitalization of obstetric cases is considerably higher in Walton County than in most rural Georgia counties.

Several things together have produced a remarkable increase in the percentage of hospital deliveries in this county over the past decade. In 1939, 5.2 per cent of the patients delivered in the county went to the hospital. The percentage has steadily increased until in 1948, 78.2 per cent of deliveries in the county were hospital deliveries.

I know there are those who argue eloquently in favor of home deliveries. But there is no doubt in my mind that our high percentage of hospital deliveries, making prompt and effective medical care possible, has spared us several maternal deaths.

It is interesting too to record, for the past several years, the percentage of births in the county that were attended by physicians.

Beginning in 1942 and continuing through 1948 the percentages are as follows: 64.1; 65.5; 68.9; 68.0; 72.7; 70.8; and 69.3. Also the percentage of deliveries by lay midwives was 35.9 in 1942 and 14.9 in 1948. Obviously the nurse midwife has taken business from the lay midwife, not from the doctor.

In conclusion, I submit that the nurse midwife program in Walton County is no longer experimental, but has proved to be a satisfactory solution to the problem of maternal care for the very low income group. This service and the medical profession are working together to elevate the standard of obstetric care in the county. It is a program of essential service on which doctors and local public officials can agree; it could doubtless serve as well in many communities in the State as it does here. I believe that any such program should be administered by a Doctor of Medicine who has a sympathetic understanding of the problems of practicing physicians.

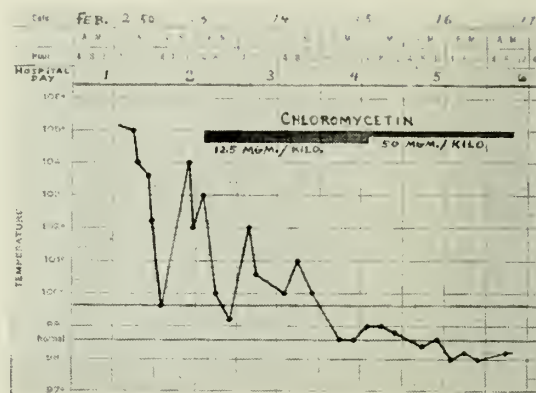
A CASE OF POST-VACCINAL ENCEPHALITIS TREATED WITH CHLOROMYCETIN

DAVID S. MANN, M.D.
FRANK E. THOMAS, M.D.
Albany

A case of post-vaccinal encephalitis with recovery is presented. It is believed this case may be of interest because chloromycetin^R seemed to be of definite benefit for this rare condition. It is also probably of some interest that this child developed encephalitis in spite of being vaccinated when he was slightly less than one year old.

REPORT OF CASE

R. L., a white male approximately one year old, was first seen in the hospital emergency room Feb. 12, 1950. He had had a smallpox vaccination of the right arm nine days previously. The preceding day he had been somewhat fretful. On the morning of February 12 his temperature was 100° F., but he did not seem particularly ill. His vaccination had "taken" well, had gone



through the usual stages, and was then at approximately the height of reaction. During the day his temperature and malaise gradually increased. A generalized convulsion suddenly overtook him, and the parents immediately brought him to the hospital.

He had just completed a generalized convulsion, witnessed by emergency room attendants, and was still "twitchy" when first seen by one of us. Rectal temperature was over 105° F. There was moderate but definite stiffness of the neck. The vaccination was at the height of reaction, and was of a more adult-type reaction than is usually seen at this age. An umbilicated pustule about 1 cm. in diameter was surrounded by an irregular, dark, reddish zone of thickened skin approximately 0.5 cm. wide. There was no redness or swelling of the arm, and no lymph nodes were palpable. Reflexes were active, equal, and not unusual. The examination otherwise revealed normal findings.

The patient was admitted to the hospital and the usual temperature-reducing measures instituted. Subcutaneous fluids were given, mainly because of the hyperpyrexia, as there was no dehydration clinically. Sodium luminal^R was given for sedation, and penicillin and a liquid sulfadiazine preparation were started.

Blood work showed a red cell count of 5,330,000; a white cell count of 21,700 with 59 per cent polymorphonuclear leukocytes, 40 per cent lymphocytes, and 1 per cent monocytes. The urinalysis was normal.

The temperature was lowered somewhat, but remained high, the first hospital day. The child vomited almost all food and fluids the first day. There was another generalized convulsion the first night. On the morning of the second day a lumbar puncture was done. This revealed clear fluid under a pressure of 310 mm. of water. There was no evidence of block in the cerebrospinal canal. Cell count on this fluid revealed only 2 cells per cubic mm. Protein and sugar tests were not done through error. Culture later proved negative.

At this time one of us (F.E.T.), suggested the use of chloromycetin^R on the theory that, being a virus infection, post-vaccinal encephalitis might respond to it. Accordingly, 100 mg. of the drug was ordered every four hours, five times daily (This was approximately 50 mgm./kilogram of body weight, as the child weighed about 22 pounds). The first dose was given at 4 P. M. of the second hospital day. Sulfadiazine was discontinued. Penicillin, 400,000 units twice daily, was continued, to prevent any secondary infection.

Improvement was rapid. Within thirty-six hours after the first dose of chloromycetin^R the temperature had dropped to normal, and it remained normal thenceforth (See temperature chart). Likewise the vomiting, nuchal stiffness, increased irritability, and fretfulness cleared swiftly, all having disappeared by the fifth hospital day. On the fourth day it was discovered the child had been receiving 250 mg. of chloromycetin^R each dose, instead of 100 mg. as ordered. This was corrected at this time. Thus for the first two days the patient had received a dosage of 125 mg. kilogram. There was a mild diarrhea on the fifth day, which cleared rapidly with minimal

treatment. It is possible this was a mild gastro-intestinal disturbance due to chloromycetin,^R but this was not thought to be the case. Even if true, the reaction was mild and followed extra large dosage.

A fine rash, having the appearance of a mild drug or allergic rash, was present over body and thighs the fifth hospital day; it had almost disappeared the next day, when the patient was discharged.

Lumbar puncture was repeated on the fifth day but was not entirely satisfactory. However, the fluid was definitely no longer under increased pressure, as it ran out very slowly through a 20 gauge needle.

On the sixth hospital day, the day before his first birthday, the patient was discharged as cured. There were no positive physical findings at this time, and a dry scab was all that remained of the vaccination. Total dosage of chloromycetin^R in the hospital was 3.6 Gm. One dozen 100 mg. capsules were given him on discharge, to be taken five times daily at home. Thus, the total chloromycetin^R dosage was 4.8 Gm.

The child was re-examined one month later; all findings were normal.

Summary and Conclusions

A case of post-vaccinal encephalitis in a white boy slightly less than one year of age is presented. Though very ill at first, recovery was prompt after the administration of chloromycetin^R in a dosage of 125 mg./kilogram daily, reduced to 50 mg./kilogram after 48 hours. The temperature became normal 36 hours after the first dose of the drug, and remained normal. Penicillin and supportive treatment were also given.

It is our opinion that chloromycetin^R was of definite benefit in this one case of post-vaccinal encephalitis. Because of the rarity of this condition, it is impossible for a series to be obtained. Thus scientific evaluation of the effectiveness of treatment with chloromycetin^R or other chemotherapeutic agents will have to depend on the tabulation of isolated reports such as this, and the comparison of results with previous percentages of mortality and morbidity.

HEALTHGRAM

In one large American city, the reporting of cases of tuberculosis has been compulsory for more than half a century. Yet, despite this long history of experience in the field, about 40 per cent of the tuberculosis deaths in the past six years were never reported as living cases of tuberculosis. And this is not alone the experience of this particular city. The American Public Health Association reported in 1947 that in 66 communities 30 to 89 per cent of the tuberculosis deaths were unreported as living cases. Cedric Northrop, M. D., Robert J. Anderson, M. D., and Herbert I. Sauer, B.A., Pub. Health Rep., Aug. 5, 1949.

CARCINOMA OF THE STOMACH

T. C. DAVISON, M.D.

A. H. LETTON, M.D.

Atlanta

We are accustomed to living in a world filled with disasters—wars, earthquakes, train, auto and airplane wrecks—yet we are not complacent about them. They are a constant source of menace to ourselves and our minds. The world reacted with horror a few years ago when it was learned that the atomic bomb at Hiroshima killed 78,150 persons¹. We all shuddered at the death toll of 512 at Texas City a few years ago.¹ Yet in contrast we are rather complacent about the 189,811 who died from cancer in 1947 in the United States.² Every city in the country checked their hotels and revised their fire laws following the holocaust of the Winecoff Hotel, which claimed 121 lives³ a few years ago in Atlanta. But no one got too worried, except a few doctors, about the 25,967⁴ victims of cancer of the stomach in 1947 in the United States alone. Why? There are two reasons: the first is that cancer slips as a thief in the night, killing and moving on; while disaster comes on suddenly claiming all its victims at once. Cancer is not seen by the majority of people and goes unnoticed. Secondly, there is little the layman feels he can do about cancer. He thinks that it is the next fellow and not himself who will develop it; he feels doing something about cancer is the doctor's job. What are we physicians going to do about it? What can we do? There are two things which can be done: the first, is to find the cancer sooner; the second, is to remove it more radically. Let us consider ways that we can bring these about.

There has been considerable publicity in

Read by Dr. Letton before the Tenth District Medical Society, Monroe, Aug. 18, 1949.

the lay press recently about cancer, and we doubt that it would be too wise to push this much harder than at present because of the great mental unrest it causes in so many of our unstable individuals. Thus, we are going to have about the same difficulty in the future in seeing people earlier because they are so reluctant to see about little things. In a large series⁵ of patients with cancer of the stomach, it was noted that an average of six months elapsed between the time the patient's first symptoms appeared and his visit to the physician. This is almost incredible, but what is more unbelievable is that an average of five months elapsed between the time of the first visit to the physician and his operation. This is the physician's fault and it is this five-month period which we can reduce, and which we must reduce. This five month period is directly the result of and an indication of the vague symptoms of early cancer of the stomach. The majority of the time, we have been too prone to give the patient some tablets or powders and a diet for his indigestion, and ask him to return in three weeks—if at that time he is still having trouble, then we have changed his medicine, etc. Such is the routine pattern of mild dyspepsia—playing along for an average of five months, letting cancer grow larger day by day, while we should have done an x-ray examination by a qualified roentgenologist when the usual simple treatment didn't have the desired effect. This, of course, is going to bring about many examinations which won't find malignancy, still it won't be a waste for it will usually point to some other disease, even if it doesn't it will rid the patient's fears and help him to have more confidence in his physician—for now that he knows that he is being looked after. Everyone appreciates a physician being thorough.

In order to be complete, let us speak

briefly of the symptoms of malignancy of the stomach. The typical textbook picture actually is the picture of far advanced cancer of the stomach. Early malignancy of the stomach has no pathognomonic symptomatology—it varies directly with the location of the lesion and with its size and type. It may be epigastric discomfort, belching, a feeling of fullness in the upper abdomen, new idiosyncrasies to certain foods, or just the inability to eat rich, heavy meals where once such could be tolerated. These symptoms are due to some obstruction or constriction in the gastric lumen—the lack of pliability of the stomach due to malignant infiltration preventing proper movement of the stomach contents. Another early symptom may be fatigue, loss of endurance, or pallor. All of these are caused by anemia which is due to either one or a combination of the following: the lack of Castle's intrinsic factor for maturation of red cells due to involvement of the stomach by the malignancy or due to actual blood loss from the tumor. The symptoms of gastric ulcers may also be the symptoms of gastric carcinoma, for you must remember the large percentage of gastric ulcers that are malignant, and the even larger percentage that are premalignant.

X-ray examination should include a fluoroscopic view of the stomach. This actually is more important than the pictures themselves, for here the actions of the stomach, the peristaltic waves can be watched. Pliability of the stomach may be determined and small defects may be pressed and made to fill out where they otherwise may go unseen. A good fluoroscopic examination by an expert is unsurpassed.

The concensus of opinion is that the overwhelming majority of gastric (not duodenal) ulcers that are over 2.5 cm. (1 inch) in diameter have undergone malignant degeneration or have been caused by a cancer.

In a series of 869 cases reported by Walters,⁶ 14.5 per cent of gastric ulcers smaller than 2.5 cm. in diameter (1 out of 7) are malignant and 22 per cent, practically one quarter, have already spread to the regional lymph nodes. This is about the same odds as Russian roulette.

The gastric analysis may or may not be of value: 59 per cent show achlorhydria, with no acid in the stomach, while 25 per cent have a decreased amount of stomach acid.⁷ Thus 84 per cent have lower than normal, the rest have normal or an increased amount of acid. In the past two years we have found quite helpful the application of Papanicolaou's technic in examining smears of gastric contents. When one finds malignant cells then we know we are dealing with cancer; but, of course, where none are found we have no assurance that we did not overlook them. Its similar to a fishing trip; when we catch fish we know that there were fish in the lake but when we don't its no sign that there were no fish there.

In all of these methods of diagnosis we have mentioned none is 100 per cent, but to make our diagnosis a little more sure we ask Dr. John Atwater, in our office, to use a gastroscope with which the stomach can be visualized without too much difficulty. This again is not 100 per cent, but combining it with our other methods it makes our results more accurate.

Then to find cancer earlier, let us remember cancer may be in any patient over 40 years (and some under) of age, and let us not treat gastric ulcers with expectancy (we believe they should all be treated surgically. If not they should be carefully watched with x-ray and gastroscopy). Thus, we can reduce that average five-month period between the first visit to the physician and the operation considerably, i.e., getting the lesions earlier and resulting in more cures.

Earlier we mentioned another method that would reduce the mortality, which was to remove the ulcers and cancers more radically. By this, we mean to do complete gastrectomy in each instance, and we do mean to go well around the area and to remove the regional lymph nodes. Even though these nodes are not enlarged they may harbor only a few malignant cells which if left in would ruin the chance of the cure. The only way to cure cancer of the stomach is to completely remove it surgically.

To demonstrate some of the complications in diagnosis, in treatment and in after treatment, let us show you the case of Mr. W. C. H.—this is *not* a composite picture, i.e., one made up of several different patients; but this did all actually happen in one person:

Mr. W. C. H. was 72 years old when he came to us three years ago. When he was 48 years old, 22 years ago, one of us (T. C. D.) operated on him for a gastric ulcer. Upon looking up his old record, we find the ulcer was on the lesser curvature, and a posterior gastroenterostomy was done because of pyloric stenosis. Since then he has had mild chronic dyspepsia which was relieved by alkalies. Six months prior to his visit to us he began feeling weak; this had progressed markedly so that his activities are by now quite limited.

Physical examination was negative except for an emaciated, underweight white male aged 72, who showed grade 1 arteriosclerosis of his retina, and a small hemorrhoid. The mucous membranes were quite pale. His red blood count was 2,830,000 and his hemoglobin 49 per cent. He was hospitalized and given 2,000 cc. of whole blood which brought his hemoglobin up to 90 per cent, with the help of liver injections, and iron and vitamins orally.

His gastric analysis showed 52 degrees of free and 64 degrees of combined acid with positive blood in all specimens. X-ray examinations revealed a fungating tumor on the lesser curvature of the stomach where the old ulcer had been 20 years ago. We next had Dr. Atwater gastroscopically examine the gentleman, who demonstrated a large fungating cancer with some normal gastric mucosa proximal to it on the lesser curvature, which suggested that this lesion might be operable.

We were able to perform a complete gastrectomy after cutting the gastrocolic ligament near the colon and cutting the old gastrojejunostomy and doing a new jejunojunostomy. We then cut away the mesogastrium near the coeliac axis, for an enlarged node was located along the course of the left gastric artery. The duodenum was cut about 1 cm. distal to the pylorus and turned in. The vagi nerves were next cut, so that the stomach could be pulled down and an esophagojejunostomy performed, using two rows of sutures. Next, a jejunojunostomy was performed to make the bile by-pass the esophagojejunostomy. The new routing of the intestinal tract and its anastomosis are shown in Fig. 1.

The patient's postoperative course was uneventful; he went home on the twelfth postoperative day. One week

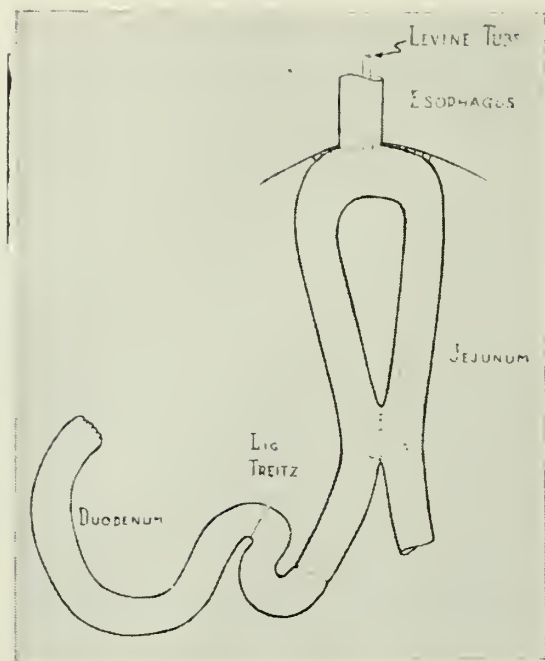


Fig. 1. Sketch showing the anastomoses following complete gastrectomy.

later he had a chill and high fever, and an x-ray of his chest at this time suggested a subphrenic abscess in spite of his smooth postoperative course. He was given large doses of penicillin and the next day his temperature did not go over 100° F., but the following day it jumped to 104°. The malaria smear showed many parasites and a course of atabrine promptly controlled his troubles. His further recovery was uneventful except for a pernicious type of anemia which gradually developed, which was corrected by ventriculin with iron. One donor, upon questioning, confessed that he had contracted malaria while in the Pacific during World War II; this probably was the source of the malaria since the patient had never had it prior to this time.

The patient gained back his usual weight and returned to his usual occupation, and gradually was able to eat three meals a day which he enjoyed. Two years later he died from an unrelated disease and autopsy revealed no evidence of any cancer of the stomach.

The pathologic examination of the operative specimen revealed that the nodes near the stomach along the left gastric artery were involved while those nearer the coeliac axis were not—it was thus felt that this radical procedure removed all the malignant cells since the nodes "upstream" were involved and the nodes farther "downstream" were not, and thus gave this gentleman two years of useful, trouble-free life when a lesser procedure would have failed. This may have offered even more life had not some other diseases interrupted his course.

It is thus our feeling that one should remove the regional lymph-nodes when dealing with cancer of the stomach, just as one does when dealing with cancer of the breast.

Summary

1. A brief review of the problem of cancer of the stomach has been presented.

2. Suggestions as to management of dyspepsia, so as to cut down on the five-month average period from the first visit to the

physician to operation, have been made. Remember *cancer first*—don't treat gastric ulcers expectantly.

3. A more radical gastrectomy should be performed to be sure and get all of the cancer cells.

4. An interesting case of cancer of the stomach on whom a total gastrectomy was performed was presented.

5. A cancer patient in whom malaria was found, probably acquired malaria by way of transfusion, was reported.

REFERENCES

- 1-3. Information Please, Doubleday & Company, Inc., and Garden City Publishing Company, Inc., 1948.
- 2-4. National Summaries of Vital Statistics Report for 1947.
5. Georgia Cancer Bulletin, 1948.
6. Walters, Gray and Priestly: *Carcinoma of the Stomach*, Philadelphia, W. B. Saunders Company, 1943, p. 212.
7. Walters, Gray and Priestly: *Carcinoma of the Stomach*, Philadelphia, W. B. Saunders Company, 1943, p. 75.

MIND, MATTER AND THE DOCTOR

H. B. JENKINS, M.D.

Donalsonville

Mr. President, members of the Second District Medical Society and visitors. For four months I have been congratulating myself on receiving an invitation to talk to you today. I wish to thank and to congratulate the young men of your program committee and to assure them that an invitation to appear before this society is considered equally as important as would be an invitation to appear before the New York Academy of Medicine or before the Royal College of Surgeons.

Having been requested to talk on medicine, a subject has been selected about which all of us know very little. It is mind, matter and the doctor, with emphasis on the importance of the doctor learning more about the minds of his patients and applying this knowledge in the practice of his profession. No paper pertaining to psychiatry is re-

called as having been read before this society during the past twenty years. The importance of the subject is shown in the rejection by the draft boards of 1,850,000 young men for mental disorders during World War II, or 38 per cent of all rejections. In addition there were approximately one million admissions to Army hospitals for mental disorders during World War II, with 50 per cent of those admitted occurring within 30 days after induction and 85 per cent within the first six months of Army service. Only a small percentage were admitted for mental disorders due to battle stress or battle fatigue, and of the small percentage admitted more than half were returned to duty. If we can place any faith in psychiatric practice in the Army these appalling statistics emphasize our failure in helping to develop healthy minds in our patients. Are we going to dismiss these figures with the assertion that personality adjustments are not important in civilian life and that those mental disorders were due to the interruption in our serene mode of living? That would be the easy way but a visit among the patients in our State hospitals will convince us that we have a tremendous problem in the prevention of mental disorders in our people in peace time as well as in war time.

Before getting too deeply involved in the subject of mind, matter and the doctor, a story, which some of you have heard, will be told about mind, matter and the man. While serving as President of the United States, Mr. William Howard Taft was said to have weighed an average of 317 pounds—a lot of matter for one man. On an occasion of a gathering of Republican men and women in New York City, Mr. Taft was the honored guest and Mr. Chauncey Depew was the toastmaster. In introducing Mr. Taft to the distinguished gathering, Mr. Depew addressed the group as follows: "La-

dies and gentlemen, we have with us a man who is pregnant with the ideals of American citizenship, a man who is pregnant with the thoughts of better international relationship, a man who is pregnant with those factors which tend toward community betterment, a man who is pregnant with the doctrine of State Rights for all states—ladies and gentlemen, the President of the United States." In acknowledging this introduction. Mr. Taft demonstrated an active mind with his large amount of matter. With an obese abdomen supported by a pair of large hands, he replied: "My fellow Americans, Mr. Depew has referred repeatedly to my pregnancy. I have decided that if it is a boy I will name him Theodore, if it is a girl I will name her Columbia, but if it is gas and I have very good reasons to believe it is I will call it Chauncey Depew."

As to specific mental disorders, we may easily recognize the psychoses due to old age, arteriosclerosis and other circulatory changes, infectious diseases, metabolic diseases, trauma, alcohol, drugs and other exogenous poisons, newgrowths or other organic changes in the nervous system, but we must remind ourselves that only a very small per cent of these readily recognized psychoses were concerned with the rejection of nearly two million young men for government services during World War II. The psychoses from infectious diseases like syphilis and epidemic encephalitis are decreasing rapidly because of the progress we have made in developing preventive and curative measures for the basic disease. The psychoses from the metabolic diseases like pellagra and beri-beri are likewise decreasing as a result of medical progress. The psychoses from drugs, alcohol and other exogenous poisons are more or less static in number. The psychoses from arteriosclerosis, other circulatory changes and senility are increasing because people are living

longer. The psychoses from newgrowths or from other organic changes in the nervous system, comparatively speaking, are not a major problem.

What about the psychoses and psychoneuroses which disqualified so many of our young men for Army service? They still exist as major problems and help fill the beds in our state hospitals with the dementia praecox, the manic depressive, the paranoia, the psychopathic personality and the mentally deficient. Through the application of eugenic laws the number of mentally deficient is being reduced but we are doing too little for the young people in their twenties and thirties who are being diagnosed as manic depressives, dementia praecox, paranoias, psychopathic personalities and psychoneurotics. These may not be readily recognized and many etiologic factors are mentioned by different psychiatrists, but we are failing in our duties if we make no efforts to learn and observe the signs and symptoms of these diseases among our patients and to give these patients the help which they need. Otherwise we should designate ourselves as specialists in the diagnosis and treatment of organic diseases. We do know that environmental factors play a dominant role in the causation of mental disorders in the young. Where young people are brought up in good surroundings, with good families and good social contacts and without problems of personality adjustments, mental disorders seldom develop. As general practitioners we have other duties besides catching babies, giving shots to people who don't like to take medicine by mouth or congratulating our patients who diagnose their own cases of appendicitis, gallbladder disease or biliousness. When a doctor and a patient confer in an office there are *two* people in that office, both equally important, and the mind of the patient and his mental development are just

as important as the body and its physical development.

Psychiatrists and psychologists have salvaged many people and in doing so have accomplished feats which were just as spectacular, just as brilliant and just as important as those of the surgeon who removed a brain tumor or who corrected a congenital defect of the heart. Because we note that some people with physical handicaps will follow vocations which require greater training and use of those parts of the body which are physically defective, we must not think like the student who asked a psychology professor if the professor majored in psychology because he had a weak mind.

Some of us older practitioners were taught little about psychiatry and psychology in medical school. I do recall the following story pertaining to psychiatry from medical school days. A young man as a patient in a hospital for the mentally sick appeared before a parole board and was asked a number of important questions. His answer to what he would do when he received his parole was "that he would go down town, buy a sling shot, find some rocks, come back and shoot all the windows out of the hospital buildings." After repeated rejections of his application for parole he was convinced that he would have to give a different answer to this important question. His final brilliant answer was that "he would go down town, buy a quart of good whiskey, rent a U-drive-it and find a good looking girl to go riding with him. They would drink a little, pet a little, smooch a little and in the process of admiring and stroking her beautiful legs, her shapely knees and her soft thighs, he would discover her pretty elastic garters. Then, he would jerk off the garters, make a sling shot and rush back to the hospital to shoot all the windows out of the buildings." But time passes on and progress is being made in our

medical schools. Today our medical students are being taught psychiatry and psychology in a systematic manner, but there is much to be done before psychiatry attains the place in the curriculum of our medical schools that it should have if our graduates are to receive comparable training in the prevention and cure of diseases of the mind along with the superb training they are receiving in the prevention and cure of diseases of the body.

I trust that the members of this society will show such interest in the problem of mental disorders that our program committees will consider inviting speakers who know something about psychology and psychiatry to address the society on this subject at least once every year. Thank you.

STAB HEART REPAIR

Report of Case

CECIL B. ELLIOTT, M.D.

Cedartown

A penetrating wound in the cardiac region with evidence of intrapericardial pressure requires immediate surgical intervention. Successful treatment in the medical centers has been reported for a number of years and with the advent of available whole blood supply and positive pressure gas anesthetic equipment, more and more cases are being reported from the small town and country hospitals. During the last war, small groups with essential equipment were able to meet such exigencies with on the spot surgery. This experience in many instances is now being carried to the civilian emergency which dictates immediate surgical repair, no matter how small the hospital or clinic.

The immediate dangers in stab wounds of the heart or hemorrhage and heart tamponade. These may be very rapid in onset

accompanied by signs and symptoms of shock with cyanosis and marked respiratory distress. If operation is not done at once, death may result in a short time, depending upon the size and location of the heart wound. Sudden intrapericardial pressure causes a drop in arterial pressure and an increase in venous pressure.

Although it is necessary to prepare the patient hurriedly, it should be done carefully to avoid wound infection. Since the pleura is frequently injured, a positive pressure gas anesthetic should be used. One of the immediate dangers of the operation is further injury to the heart muscle while attempting to place sutures. The coronary vessels, if not injured, should be carefully avoided when placing sutures. Whole blood transfusion is indicated as soon as the heart wound is closed.

REPORT OF CASE

Case 1. A well developed well nourished male, aged 32, entered the hospital with a penetrating, sucking wound of the anterior left chest in the second I.C.S. Pulse imperceptible, B.P. 0/0, respiration 37 with marked respiratory distress. Emergency steps were taken to prohibit the ingress of air through the chest wall by sealing it with vaseline gauze. The skin was cold and clammy; neck veins were markedly distended and no cardiac sounds were detected. Preparation for operation was begun and, in the interim, a flat plate of chest was made which revealed a large globular heart shadow. Available blood from the bank was cross-matched.

The patient was prepared and draped in the routine manner. A local anesthetic was used in the initial steps of the operation, while the endotracheal intubation was being done. Ether, under partial positive pressure, was administered so that the patient was sufficiently anesthetized when heart action was resumed. Positive pressure was maintained while the chest remained open.

A semicircular incision was made from the second to fifth ribs with the curve overlapping the sternal margin and then extended through all structures to the cartilage. A flap of skin, muscle and fascia was dissected up to expose the underlying cartilage and ribs of the thoracic cage. A third and fourth two-inch rib resection, including the sternal attachment, was done. The mammary vessels were carefully clamped and ligated and a transpleural approach was made by enlarging vertically the original opening in the pleura. The pericardium was markedly distended and motionless. The pericardial wound was located and enlarged to six centimeters, thus exposing a penetrating wound two centimeters in length in the left ventricle. The tamponade was removed by suction and moist sponging. The heart wound was easily found from the spurting blood because heart action immediately became vigorous as soon as intrapericardial pressure was released. Blood transfusion was begun. The area was sprayed with 2 cc. of 5 per cent novocaine solution and the forefinger of left hand was placed over the wound. Four interrupted triple zero nylon sutures were placed through the rent under the forefinger. They were then held under tension, as the finger was removed, and tied separately. The pericardium

was irrigated with warm, normal saline solution and closed with triple zero nylon. A stab wound was made in the posterior axillary line of the sixth I.C.S., a No. 16 soft rubber catheter placed, the lung was reinflated and the chest closed tightly in layers.

The patient was placed in Fowler's position and the catheter connected to a trap to prevent positive pressure accumulation. Continuous oxygen was given for four days. He received 1000 cc. of whole blood to replace the blood loss and for six days was maintained on penicillin, quinidine and alpha-tocopherol. He was discharged from hospital on the eighteenth postoperative day.

SOME OBSTRUCTIVE LESIONS IN THE NEWBORN

J. DUDLEY KING, M.D.

Atlanta

Obstructive lesions of the gastro-intestinal tract in infants are of considerable interest to the pediatrician, the surgeon and the radiologist. Prompt diagnosis is essential in some of these lesions and, even then, the prognosis too often is poor.

During the ten-month period from April 1, 1949 to February 1, 1950 the following cases were seen in the X-ray Department of the Crawford W. Long Memorial Hospital. There were four cases of esophageal atresia, eight cases of pyloric stenosis, and one case each of the following: duodenal obstruction, atresia of the ileum, obstruction due to meconium, and imperforate anus.

Esophageal atresia may be recognized during the first few hours of life by excess mucus and prompt regurgitation of the first attempted feedings. The following case histories are of interest.

REPORT OF CASES

Case 1. This premature male infant weighed 4 lb. 6 oz. at birth. He was admitted ten hours after delivery at a nearby town, and a clinical diagnosis of esophageal atresia was made. Radiographs showed the site of atresia to be high, at the level of T-3. Air was present in the intestinal loops, indicating that a fistula was present between the lower esophageal segment and the tracheobronchial tree. This is the most common type of esophageal atresia; that is, a blind pouch above and a fistulous communication with the lower esophageal segment and the tracheobronchial tree. About 70 per cent of the esophageal atresias are of this variety.

An esophageal anastomosis and fistulectomy was done 30 hours after admission. The immediate postoperative course was good, but the baby developed atelectasis and died 48 hours postoperatively.

Case 2. This was a normal delivery, but the baby was a typical mongolian. Excess mucus and vomiting at the first feeding led to the clinical diagnosis. Fluoroscopy and radiography with the injection of lipiodol into the esophagus revealed a high atresia of the esophagus with a fistula connecting the esophagus and trachea above the site of the atresia. Air was again present in the intestinal loops indicating that there was a communication below the site of the atresia between the lower esophageal segment and the tracheal bronchial tree. This type of atresia is less common, for a fistula was present both above and below the site of atresia.

Case 3. This premature infant was admitted about three hours after birth at a nearby town. Her weight was 4 lb. 11 oz. An esophageal atresia was demonstrated at the level of T-2. At operation a wide defect was shown between the two esophageal segments. The upper segment actually did not enter the chest. A fistula was closed between the lower segment and the bifurcation of the trachea. The next day the upper segment was exteriorized and a gastrostomy done. The baby is doing well now and weighs about 6 lb. Another operation is planned when the baby is 18 months old. The stomach will be mobilized and brought up through the chest to the neck if possible. If this is not possible, then a tube will be grafted and an anastomosis established under the skin of the anterior chest wall.

Hypertrophic pyloric stenosis is not, in the strict sense, an obstructive lesion in the newborn. It manifests itself a few weeks after birth, but since it is a congenital lesion, it is included here. In specimens obtained from infants a week or ten days of age, the mucosa and submucosa of the pylorus are essentially normal. After this time the forcing of curds through the small opening brings about edema of the mucosa and a slight increase in the leukocytic infiltration of this layer. This mechanical irritation therefore produces thickening of the mucosa, which further reduces the already small size of the pyloric lumen. It is for this reason that infants do not exhibit signs of obstruction until they are about two weeks of age in spite of the fact that the hypertrophied muscle has been present since birth.

The radiologist, in attempting to demonstrate hypertrophic pyloric stenosis, attempts to obtain radiographs with the pyloric canal outlined by barium. If this is done, the so-called "string sign" is produced. This sign is considered to be pathognomonic by many observers. The elongated canal may be two or more centimeters in length. The normal canal is less than one centimeter in length.

Certainly radiographic examinations are not necessary in typical cases. Radiographs are reassuring confirmatory evidence, however, and the demonstration of a normal pyloric canal practically excludes hypertrophic pyloric stenosis as the possible cause of vomiting.

Obstruction in the duodenum may be due to atresia, stenosis or malrotation of the midgut with or without peritoneal bands across the lower part of the descending duodenum. Our case was due to malrotation. In the majority of these cases the cecum lies just below the distal half of the stomach, and peritoneal bands cross from the cecum or ascending colon and attach to the posterolateral abdominal wall. Thus these bands cross the duodenum and cause obstruction. When the bands are absent, the cecum may lie over the second or third portions of the duodenum and cause obstruction by external pressure. In our case no bands were demonstrated across the duodenum, but there was a volvulus of the midgut which is a fairly common complication in these cases.

The case of *atresia in the ileum* was somewhat unusual. The baby developed abdominal distention two days after birth and vomited feedings. Radiographs showed small irregular calcific shadows scattered in several areas of the abdomen. The small calcific shadows appeared to be intraluminal. In the right lower quadrant of the abdomen circular calcific shadows were present which appeared to outline the lumen of the bowel in that area. No gas could be demonstrated in the large bowel.

At operation numerous adhesions were found. The abdomen was entered with considerable difficulty because of these dense adhesions. An atresic segment of gut was found in the ileum and 50 cm. of small bowel was resected and re-anastomosis was done. Microscopic examination of the

atresic segment showed a hemangioma with extensive calcification in the wall of the bowel. The immediate postoperative course was good but an uncontrollable diarrhea developed later. This diarrhea continued and the baby died 6 weeks after operation. At postmortem examination 50 cm. of small bowel and 42 cm. of large bowel were present. This together with the 50 cm. of small bowel resected is less than one-half the usual length of the gastro-intestinal tract for an infant of this age.

It is felt that this was responsible for the uncontrollable diarrhea. The immediate cause of death was bronchopneumonia.

Approximately three-fourths of patients with *ano-rectal anomalies* have complete obstruction and are therefore seen in the first few days of life. Usually the obstetrician notes an imperforate anus if this is present. This was the case in our patient.

Wagensteen and Rice in 1929 first described the ingenious way we now all use to investigate the position of the blind rectal pouch. The baby is inverted and an opaque object is placed on the dimple of skin where the anal opening should be. Lateral radiographs are better than anteroposterior radiographs for locating the position of the pouch. It is well to remember that 18 to 24 hours may be required before the gas can be propelled through the sticky meconium to the rectum. An examination prior to that time, showing no gas in the rectum, is not reliable; and has, in many cases, led the surgeon to make unnecessary abdominal approach to re-establish continuity.

HEALTHGRAM

Tuberculosis is not a simple health problem like the removal of tonsils or the repair of a broken leg. It is a complex, long-time ailment almost always resulting in a special way of living. Tuberculosis involves many things besides hospital, medical, and nursing care. It has many requirements on the social welfare side and these needs are often of long duration. The tuberculosis problem is one of prehospital and posthospital care with all that they mean. Moreover, it is a problem of the care of the patient's family as well as of the patient. Ruth Taylor, Nat. Tuberc. A. Bull., Oct., 1949.

THE JOURNAL

OF THE
MEDICAL ASSOCIATION OF GEORGIA

EDGAR D. SHANKS, M.D., Editor
478 Peachtree Street, N. E., Atlanta, Ga.

JUNE, 1950

THE CHALLENGE . . . PUBLIC RELATIONS

(This editorial, written by V. O. Foster, Executive Secretary for the Tennessee State Medical Association and published in its May 1950 journal, applies to Georgia as well. Read it, please.—Ed.)

The special session of the House of Delegates called for May 13 will go down as a momentous one in the history of the Tennessee State Medical Association. Momentous because a decision will be made on projecting and financing a strong and positive Public Relations Program.

As a result of the changes in the administrative and executive functions of the headquarters office which came about during the annual meeting in Memphis, it might be assumed that the Executive Secretary is now in a position to execute a strong Public Relations program.

Although Public Relations is one of his new responsibilities, the lack of personnel, assistance, and time will prevent his giving the necessary attention to such an all-important phase of the Association's activities. Routine administrative duties such as director of finance, the business management of the *Journal*, services to the various boards, councils, and committees of the Association, the handling of the multitudinous details of The Tennessee Plan, routine office management, public service demands, and publicity simply means that the Public Relations program cannot possibly be more than an incidental and totally inadequate consideration of the Executive Secretary.

The Executive Secretary conceives of the headquarters office as having two all-inclusive purposes: (1) services to the profession and (2) services to the public. Every activity of the executive office falls clearly into one of these service fields. If a creditable job is to be done in both fields, adequate personnel, facilities, and funds are necessary. It is in the area of "services to the public" where a sound and effective Public Relations program can make the greatest contribution to the Association.

With the addition of a new staff member working in the special field of services to the public and with the Executive Secretary free to render necessary and vital services to the profession, a reasonable amount of success could be expected in both fields.

Each of these services would complement and reinforce each other. Obviously these two fields

of service must have a high degree of coordination and administrative control. Such coordination will avoid the serious errors of working at cross-purposes, duplications, and waste of the time of personnel, facilities, and funds.

Such a dual program *must* be service, not publicity. It must be performance, not propaganda. It will stand or fall eventually upon whether or not a solid record of achievement is accomplished.

Based on a backlog of experience in other states, it can be said that medical Public Relations—good Public Relations—falls into two percentages:

Eighty per cent depends upon the relations between the doctor and the patient. Twenty per cent depends upon the presentation of the medical profession to the public. These two are, however, inseparable and interdependent.

It must be pointed out that the medical profession now enjoys, and has long enjoyed, a highly favorable public acceptance and approval of its major service—the service of rendering medical care of the highest quality. The public has no quarrel with the medical profession over the superior scientific quality of its service. In fact, the technical superiority of medical science has done much to place a damper on open criticism of other aspects of medical practice—the social, economic, and even political aspects.

It is in the fields of medical economics, medical sociology, and medical politics (statesmanship) where more effective leadership needs to be demonstrated.

The medical profession, because of inadequate public information about its accomplishments, and because there are enemies of the profession who would destroy it for their own selfish purposes, feels that it must submit its own case to the bar of public opinion. The case must be effectively presented. There is no individual nor group of individuals who can escape the searching light of public opinion. Eventually public opinion crystallizes and represents itself in political, economic, and social action. If these actions are favorable, all is well. To the degree that they are unfavorable, there is an inevitable decline in public approval and approbation.

The present effort to destroy the private practice of medicine is a threatening example of the length to which unfavorable segments of the public will go in order to bring about certain changes which they desire. Of course, the establishment of political medicine would not be in the public interest and the public would pay a dear price for its realization. It is crystal clear that the medical profession, as a defender of the public interest, must do its part to preserve and to extend the free enterprise system. This system has been the atmosphere in which not only

medicine, but the whole economy has given America the highest standard of living in the world.

There are problems in the field of distribution of medical care, there are problems in the field of cost of medical care, and there are problems related to the availability of medical care. All these problems are challenging opportunities for increasing the services of the profession to the public. They are important aspects of a Public Relations program.

There is no profession that can lay claim to loftier ideals, to more humanitarian purposes, and to greater dedication to the public welfare than can the profession of medicine. The intelligence, the courage, the devotion to duty, to say nothing of the superior scientific accomplishments of men of medicine, have earned an overwhelming amount of public acceptance and approval.

It is not enough, however, to "be good and do good." Publicizing these virtues is a part of the Public Relations equation. The accomplishments of medicine must be known by the public. The public is looking to the profession for the solution of many of its medical care problems. The profession can solve these problems and solve them in voluntary, cooperative ways. There is still time. Unless they are thus solved, it is apparent that the public will look to a bureaucratic arm of the federal government for such solutions.

The aim and purpose of a good Public Relations program should be to conserve and create a high degree of favorable public opinion toward the profession and its members.

Public Relations is not new, but an appreciation of its value is relatively new. The Great Physician understood and utilized effective Public Relations techniques, else how would you interpret this line of Holy Writ:

"Let your light so shine before men, that they, seeing your good works . . ."
Or how would you interpret Lincoln's observation when he said:

"Public sentiment (opinion) is everything. With public sentiment nothing can fail; without it, nothing can succeed; consequently he who molds public sentiment goes deeper than he who enacts statutes."

UNITED STATES PHARMACOPEIA

One of the most important decennial meetings of the United States Pharmacopeial Convention was the recent meeting in Washington, D. C. Preceding the convention was a conference, at which time a series of simultaneous meetings was held on scientific subjects of pharmacopeial interest. These included reviews of the status of pharmacopeial standards for protein hydrolysates, antibiotics, water for pharmaceutical uses, volatile oils, vegetable drugs and dermatologic

preparations and other topics.

The convention considered and adopted with some modification the recommendations of the Committee on Constitution and By-Laws, which was appointed at the 1940 convention meeting. This committee reported at a special meeting in 1942, at which time the proposed by-laws were adopted, but the constitution was held over until the 1950 meeting. The changes in the constitution were extensive but reflected the attempts of those who are interested in the United States Pharmacopeia to insure continued progress of this organization.

At this convention officers and members of the Committee of Revision for the 1950-1960 convention were elected. The president is Dr. Allen H. Bunce of Atlanta, Georgia. Dr. Bunce, who had been chairman of the Committee on Constitution and By-Laws, succeeded Dr. Carey Eggleston. Adley B. Nichols and W. Paul Briggs were re-elected secretary and treasurer, respectively. The vice president is Dr. Theodore G. Klumpp. The Board of Trustees, which includes two representatives from medicine, two from pharmacy and two at large, consists of Robert L. Swain, editor, *Drug Topics* and *Drug Trade News*; P. H. Costello, secretary, National Association of Boards of Pharmacy; Ernest Little of the College of Pharmacy, Rutgers University; Carson P. Frailey, executive vice president, American Drug Manufacturers Association; Arthur C. DeGraff, professor of therapeutics, New York University College of Medicine, and Austin Smith, editor of *The Journal of the American Medical Association*. Swain, Costello and Little were members of the preceding Board of Trustees; the others are newly elected. Lloyd C. Miller was introduced as the director of the Committee of Revision for 1950-1960. He succeeded Dr. E. Fullerton Cook, who for five decades has worked closely with the United States Pharmacopeia. Dr. Cook gave untiring service during his time as director of the Committee of Revision and was eulogized on several occasions at the convention.

The United States Pharmacopeia is an official compendium under the provisions of the Federal Food, Drug and Cosmetic Act and is of outstanding importance in the establishment of drug standards for the enforcement of this act. Thus it has tremendous influence in industrial and other circles and is of great importance in the protection of the health of the people. Furthermore, it is internationally known and has been officially recognized in a number of Latin American countries. Those who have an opportunity to serve the Pharmacopeia and its interests have a right to cherish this opportunity. Because of the nature of the Pharmacopeia and what it represents, those who are responsible for its affairs cannot think of personal interest; they must always have in mind the interest of the Pharmacopeia. The newly elected officers and members of the Committee

of Revision for the 1950-1960 United States Pharmacopeial Convention should have the continued support of the medical, pharmaceutical and allied organizations in their work.—*Editorial The Journal of the American Medical Association, May 27, 1950.*

ENJOY YOURSELF: IT IS LATER THAN YOU THINK

It was several years ago; I was ill at the time. Dr. Edgar D. Shanks, editor of *The Journal* of the Medical Association of Georgia, asked me to write an article from the point of view of a patient. I wrote the article "I Became a Patient" which was published in *The Journal*.

Recently I have been ill again and among the books brought to me to read was "A Chinese Garden". It is a short story by Dr. Frederic Loomis, and gives the probable origin of the current expression "Enjoy yourself, it is later than you think". This story is to the point and furnishes food for thought. As I read it I was reminded of a resolution on the death of a doctor friend of mine, published recently, which stated—"His life and work were characterized by a zealous devotion to his work. It is said of him that he had no hobbies, except his work, and he was untiring in it and never refused a request for aid from a patient."

Throughout his years of arduous work he had cherished the dream of some day having time to go fishing, which was the one sport he most enjoyed. At last in December 1949, after surviving a series of heart attacks, he planned a vacation in Florida, where he could realize his ambition to go fishing. However, on December 27, 1949 he succumbed to cerebrovascular accident.

It was later than he thought—he did not live to realize his life's ambition to go fishing.

The following is the full quotation of "A Chinese Garden".

IN A CHINESE GARDEN

"In the past few years the epigram or aphorism which is the inspiration for this little story has been widely used (says its author). It was, in part, the title and the theme of a poem written years ago by Robert Service. It was used again, in part, as the title of a book on the perils of democracy written by Max Lerner and published in 1937. I have seen it used in numerous advertisements. If Robert Service coined the expression, if others saw it and read it in a Chinese garden, or if like other strange Chinese sayings it made its way into our lives by other means, I do not know.

"I have told the story of a certain letter which I received nearly ten years ago a good many times because the impression it made on me was very deep and very lasting, but I have never written it for publication; and I have never told it, on ships in distant seas or by quiet firesides nearer home, without a reflective, thoughtful

response from several of those in the little group around me who made it a matter of immediate and personal concern either for themselves or for someone dear to them."

Peking, China

Dear Doctor:

"Please don't be too surprised in getting a letter from me. I haven't any real right to address you and I am signing only my first name. My surname is the same as yours.

"You won't even remember me. Two years ago I was in your hospital under the care of another doctor. I had never heard of you. I lost my baby the day it was born. That same day my doctor, who was skillful enough but perhaps not too understanding, came in to see me, and as he left he said, 'Oh, by the way, there is a doctor here with the same name as yours who noticed your name on the board, and asked me about you. He said he would like to come in to see you if you were willing and I would permit him to, because the name is not a common one and you might be a relative.' 'I told him you had lost your baby and I didn't think you would want to see anybody, but it was all right with me.'

"And then in a little while you came in. You put your hand on my arm and sat down for a moment beside my bed. You didn't say much of anything but your eyes and your voice were kind and pretty soon I felt better. I was a very long way from home and had no one of my own. As you sat there I noticed that you looked tired and the lines in your face were very deep. I never saw you again but the nurses told me you were in the hospital practically night and day.

"This afternoon I was a guest in a beautiful Chinese home in Peking. The garden was enclosed by a high wall, and on one side, surrounded by twining red and white flowers, was a brass plate about two feet long embedded in the wall. I asked someone to translate the Chinese characters for me. They said:

ENJOY YOURSELF IT IS LATER THAN YOU THINK.

"I began to think about it for myself. I have not wanted another baby because I am still grieving for the one I lost, but I decided that moment that I should not wait any longer. Perhaps it may be later than I think, too. And then, because I was thinking of my baby, I thought of you and the tired lines in your face, and the moment of sympathy you gave me when I so needed it. I don't know how old you are but I am quite sure you are old enough to be my father; and I know that those few minutes you spent with me meant little or nothing to you, of course—but they meant a great deal to a woman who was desperately unhappy and alone.

"So I am so presumptuous as to think that in turn I can do something for you too. Perhaps for you it is later than you think. Please forgive me, but when your work is over, on the day you get my letter, please sit down very quietly, all by yourself, and think about it.

Marguerite."

"Usually I sleep very well when I am not disturbed by the telephone, but that night I was restless. I woke a dozen times seeing the brass plate in the Chinese wall. I called myself a silly old fool for being disturbed by a letter from a woman I couldn't even remember, and dismissed the thing from my mind; and before I knew it I found myself saying again to myself: 'Well maybe it is later than you think; why don't you do something about it?' And the argument with myself continued until I did what I really knew I would do all along. I went to my office next morning and told them I was going away for three months.

"It is a wholesome experience for any man

who thinks he is important in his own organization to step out for a few months. The first time I went away on a long trip, some years before this letter came. I felt sure that everything would go to pieces, even though I had an entirely competent associate, but I was almost too tired to care. When I returned I found there were just as many patients as when I left, everyone had recovered just as fast or faster, and most of my patients did not even know I had been away. It is humiliating to find how quickly and competently one's place is filled, but it is a very good lesson.

"I telephoned to Shorty, the retired colonel who was perhaps my closest friend and with whom I had been around the world, and asked him to come to my office. On his arrival I told him that I wanted him to go home and pack a grip and come on down to South America with me for a little jaunt. He replied that he would like to but that he had so much to attend to in the next few months that it was out of the question to be away even for a week.

"I read him the letter. He shook his head. 'I can't go,' he said. 'Of course I'd like to, but for weeks now I've been waiting to close a deal for all that property I've had so long, down by the lake. I'm sorry, old man, but maybe sometime—sometime—his words came more slowly. What was that thing again that woman said? 'It is later than you think'? Well—

"He sat quietly for a moment. Neither of us spoke. I could almost see the balance swaying as he weighed the apparent demands of the present against the relatively few years each of us still had to live, exactly as I had done the night before.

"At last he spoke, very seriously and thoughtfully.

"I have waited three months for those people to make up their minds. I am not going to wait any longer. They can wait for me now. Perhaps it is quite a little later than I have thought in the last few years. Maybe they are the last few years—and—"

"He jumped to his feet, again the soldier, replacing the dreamer of a moment before.

"They can go to the devil. They can go and jump in that damn lake for all I care;" and then more quietly: "When would you like to go?"

"We went to South America. We spent day after day at sea on a comfortable freighter, feeling our burdens slip off with the miles and our tired bodies being made over by the winds that swept across the Pacific from China. In the course of time we found ourselves in one of the great cities of South America. By good fortune, we became friendly with one of the prominent men of the country, a man who had built enormous steel plants and whose industries were growing rapidly. We went with him on Sunday to his *estancia*, where we were entertained with

the perfect hospitality of the South American aristocracy.

"During the afternoon. Shorty, who loves his golf, asked our host if he played the game. He replied: 'Senor, I play a little, I would like to play more. My wife is on a vacation in the United States with our children. I would like to join her. I have beautiful horses here which I would love to ride. I can do none of these things because I am too busy. I am fifty-five years old and in five years more I shall stop'.

"It is true I said the same thing five years ago, but I did not know how much we should be growing. We are building a new plant in Cali; we are making steel such as South America has never known. My steel will still be good when I am gone, and I must watch until our way is made more clear. I cannot let go even for an afternoon of golf. My office boy has better leisure'.

"Senor," I said, "do you know why I am in South America?"

"Because," he said "because perhaps you had not too much to do and had the necessary time and money to permit it."

"No," I replied, "I had a great deal to do and I did not have too much of either time or money. We are sitting here on a lovely terrace because a few weeks ago a girl whom I wouldn't know now if I saw her looked at a brass plate in a Chinese wall in the city of Peking in the heart of China."

"I told him the story. Like Shorty, he made me repeat the words 'Enjoy yourself, it is later than you think.' During the rest of the afternoon he seemed a bit preoccupied, but continued to be a solicitous and perfect host.

"The next morning I met him in the corridor of our hotel. 'Doctor', he said, 'please wait a moment. I have not slept well. It is strange, is it not, that a casual acquaintance, which you would say yourself you are, could change the current of a very busy life? I have thought long and hard since I saw you yesterday. I have cabled my wife that I am coming. I shall do myself the honor of calling upon you when I am there.'

"He put his hand on my shoulder. It was a very long finger indeed, that wrote those words on the garden wall in China."

To the members of the Medical profession, especially to those who are past forty years of age, I wish especially to commend the above story for thought.

A former patient of mine whom I had explored for painless jaundice, and found advanced carcinoma of the pancreas and liver, during his convalescence, talked to me quite freely, and being older than I, at the time, gave me some good advice. He said that he had been working hard all of his life, taking no vacations, with the idea of enjoying himself, on his savings, in his old age. Now it was too late to carry out his plans—he was dying and leaving his

savings to others. He offered me this advice for what it was worth—"You must have your pleasure from day to day and not try to save it up for some tomorrow, when it will be too late." To my fellow physicians again I would like to repeat—"Enjoy yourself, it is later than you think".

T. C. DAVISON, M.D.

AWARDS, MACON SESSION, 1950

In addition to the awards to Dr. Cleveland Thompson, of Millen, and Dr. Claude A. Smith, of Stockbridge, for their contributions to medicine and to public welfare, by the Committee on Awards, another special committee whose names are always held anonymous judged the scientific and educational exhibits and made the following awards:

Group A, Scientific:

First award to exhibit No. 9 *Gallbladder Roentgenology*—Ted F. Leigh and Edgar A. Thompson, Department of Roentgenology, Emory University School of Medicine, Atlanta.

Second award to exhibit No. 5 *Angiograph in Cerebral Vascular Lesions*—Edgar F. Fincher, Homer S. Swanson and Wm. S. Warren, Department of Surgery, Neurosurgical Section, Emory University School of Medicine, Atlanta.

Third award to exhibit No. 29, *The Detection of Pre-clinical Uterine Cancer*—H. E. Nieburgs, E. R. Pund, J. M. Bumberg and S. Bamford, Department of Clinical Cytology, Medical College of Georgia, Augusta.

Group B, Educational:

First award to exhibit No. 23, *What the General Practitioner Should Know About Tuberculosis*—United States Public Health Service, Communicable Disease Center, Atlanta.

Second award to exhibit No. 21, *Physical Medicine in Child Rehabilitation*—Harriet E. Gillette and Fred G. Hodgson, Cerebral Palsy Society of Georgia, Crippled Children's Department of Public Welfare, and Aidmore, Atlanta.

Third award to exhibit No. 1, *Activities and Training Program, Department of Ophthalmology and Otolaryngology*—Lawson VA Hospital in conjunction with Emory University School of Medicine, T. W. O. Meissner, A. Paul Keller, Augustus Gafford, John Howard, F. Phinizy Calhoun, Jr., Nathan I. Gershon and Lester Brown, Atlanta.

Drs. Thompson and Smith received silver cups for their contributions: Thompson for his untiring work for the Medical Association of Georgia and his continued interest in the development of the practice of medicine, improvement in Georgia's hospitals and clinics and improvement of public health; Smith for his work many years ago when he described the cycle for hookworm infestation of the human body.

Certificates of merit will be sent the winners of the awards named under Groups A and B.

EGYPTIAN DRUG PRODUCES GOOD RESULTS IN HEART DISEASE

A drug known as visammin and also as khellin, obtained from the fruit of a plant which grows in Egypt, Arabia and Eastern Mediterranean countries, produces good results in angina pectoris, a group of Chicago doctors report.

Drs. R. H. Roseman, A. P. Fishman, S. R.

Kaplan, H. G. Levin and L. N. Katz of the Medical Research Institute, Michael Reese Hospital, describe their study of the drug in an article in the May 13 *Journal of the American Medical Association*.

"Improvement of the cardiac status was definite in 11 of the 14 cases of angina pectoris," the doctors say. "Moderate improvement occurred in another case, but in the remaining two no benefit was obtained. In four instances the improvement persisted for a time after administration of the drug had been discontinued. This is attributable to the cumulative effects of the drug."

Nausea and insomnia believed to be caused by the drug occurred in five of these 14 patients. Response of the heart condition to visammin is described as "dramatic and unequivocal" in some cases.

A typical example of an excellent result was seen in the case of a 66 year old man with longstanding severe angina pectoris.

His response to visammin was rapid and progressive. Not only was he spared surgical operation to relieve the anginal pain, but he was able to extend his activities. The number of glyceryl trinitrate tablets he required daily dropped precipitously. His appetite improved, his despairing attitude resolved and he became alert.

In eight patients with enlargement of the right side of the heart or increased stress placed upon the right side of the heart by lung disease, striking improvement was noted following administration of visammin.

Single injections of visammin resulted in significant improvement in nine of 21 patients with acute bronchial asthma. The response was prompt, occurring within five or 10 minutes; and was often dramatic but usually shortlived.

LINK LUNG CANCER TO PROLONGED TOBACCO SMOKING

A significant relationship between prolonged tobacco smoking and development of cancer of the lung is shown by two reports published in the May 27 *Journal of the American Medical Association*.

Excessive and prolonged use of tobacco, especially cigarettes, seems to be an important factor in causing cancer which originates in the lungs, Ernest L. Wynder, B.A., and Dr. Evarts A. Graham of Washington University School of Medicine and Barnes Hospital, St. Louis, conclude.

Among 605 men with lung cancer, 96.5 per cent were moderately heavy to chain smokers for many years, compared with 73.7 per cent among the 780 men in the general hospital population without cancer, the St. Louis doctors point out. Among the cancer group, 51.2 per cent were excessive or chain smokers compared to 19.1 per cent in the general hospital group.

"In general, it appears that the less a person smokes the less are the chances of cancer of the lung developing and the more heavily a person smokes the greater are his chances of becoming affected with this disease," they say.

Smokers were classified on the basis of number of cigarettes smoked per day for 20 years or more. Pipe and cigar smokers were included by counting one cigar as five cigarettes and one pipeful as two and a half cigarettes. Light smokers were classified as smoking one to nine cigarettes, moderately heavy smokers 10 to 15, heavy smokers from 16 to 20, excessive smokers 21 to 34 and chain smokers 35 or more.

There may be a lag period of 10 years or more between the cessation of smoking tobacco and the occurrence of clinical symptoms of cancer, however, the St. Louis doctors found. Among the patients with cancer who had a history of smoking, 96.1 per cent had smoked for over 20 years.

The occurrence of carcinoma of the lung in a male nonsmoker or minimal smoker is a rare phenomenon (2.0 per cent), according to the study.

Tobacco seems to play a similar but somewhat less evident role in causing cancer in women, the doctors found. The incidence of lung cancer is less in women than in men today. This is believed to be due in part to the fact that few women have smoked for over 20 years.

There is rather general agreement that the incidence of bronchiogenic carcinoma has increased greatly in the last half century, the doctors point out. The enormous increase in the sale of cigarettes in this country approximately parallels this increase of bronchiogenic carcinoma.

Among male patients with cancer of the lungs, 94.1 per cent were found to be cigarette smokers, 4.0 per cent pipe smokers and 3.5 per cent cigar smokers. This prevalence of cigarette smoking is greater than among the general hospital population of the same age group. The greater practice of inhalation among cigarette smokers is believed to explain the increased incidence of the disease.

Data obtained from 1,650 patients admitted routinely to the Roswell Park Memorial Institute, Buffalo, N. Y., indicate that in a hospital population cancer of the lung occurs more than twice as frequently among those who have smoked cigarettes for 25 years than among other smokers or nonsmokers of comparable age, according to another study published in the same issue of the *Journal of the A.M.A.*

"Pipe smokers apparently experience an almost equal increase in the incidence of lip cancer, compared with other smokers or nonsmokers," say Drs. Morton L. Levin, Hyman Goldstein and Paul R. Gerhardt of the Bureau of Cancer Control, New York State Department of Health, Albany.

"The data suggest, although they do not establish, a casual relation between cigarette and pipe smoking and cancer of the lung and lip. Cancer is now generally considered a disease attributable to multiple causative factors. Among these are 'irritants.'

"An irritant which is noncarcinogenic alone may nevertheless increase the percentage of tumors produced when its action is combined with that of a carcinogen. Thus, some experimental basis exists for explaining the apparent effect of cigarette and pipe smoking, although the true nature of the association with lung and lip cancer remains to be determined."

HORMONE-RELATED DRUG FAILS IN TEST AGAINST RHEUMATOID ARTHRITIS

Pregnenolone, which showed some promise in early tests against rheumatoid arthritis, failed to produce good results against the disease in 18 patients, according to a report by New York doctors which appears in the May 27 *Journal of the American Medical Association*.

The study was made by Drs. C. Maynard Guest, William H. Kammerer, Russell L. Cecil and Solomon A. Berson of the Veterans Administration Hospital, Bronx, and the New York Hospital and Cornell University Medical College.

"Intramuscular injections of pregnenolone or pregnenolone acetate daily or two or three times a week resulted in no improvement in 17 cases of rheumatoid arthritis," the doctors say.

"One patient with rheumatoid arthritis of the spine improved objectively and subjectively. In one patient with rheumatoid arthritis of the spine there was minor improvement at the end of one week's treatment, but this was followed by gradual relapse in the face of continued therapy.

"It may be that larger amounts given over a longer period of time would have a more beneficial effect. The negative results have led us to believe that these agents offer no real promise in the treatment of rheumatoid arthritis."

The doctors found also that treatment with adrenalin and testosterone propionate (the male hormone) failed to result in any consistent improvement in patients with rheumatoid arthritis.

CALIFORNIA REPORT INDICATES Q FEVER IS TRANSMISSIBLE BY PERSONAL CONTACT

A report from Los Angeles indicates that Q fever may be transmitted from person to person.

Three persons apparently have contracted the disease by attending a patient, Dr. David L. Deutsch and E. Taylor Peterson, a laboratory worker, of Wadsworth Hospital, Veterans Administration Center, say in the May 27 *Journal of the American Medical Association*.

The mode of transmission of the disease was not determined.

More than 50,000 persons in the Los Angeles area probably have been infected during recent years with the microbe that causes Q fever, doctors and an epidemiologist of the National Institutes of Health, the U. S. Public Health Service and the California State Department of Public Health announced recently.

The disease was found to have occurred in the metropolitan area of Los Angeles in 1947. It commonly is characterized by headache, high fever, severe sweats and pneumonia-like changes in the lungs. Nine deaths from Q fever have been reported.

A study of Q fever made in the southern California area where infection with the microbe is widespread among cattle suggests that humans may contract the infection by occupation in dairy or livestock industries, use of raw milk and residence within one fourth a mile of places where cattle are maintained or beef is processed.

GEORGIA DEPARTMENT OF PUBLIC HEALTH

METHEMOGLOBINEMIA
CAUSED BY NITRATE POLLUTION
IN DRINKING WATER

GILBERT R. FRITH, Public Health Engineer
Georgia Department of Public Health.

Atlanta

Many reports have appeared in the literature¹⁻⁸ describing methemoglobinemia, cyanosis and fatalities due to the administration of compounds containing the nitrate radical, but Comly was the first to recognize high nitrates in drinking water as a cause of methemoglobinemia in infants. In 1915 Comly⁹ reported two cases of methemoglobinemia in infants which resulted from this previously unrecognized cause. Treatment with oxygen for 30 minutes was ineffective but the administration of a 1 per cent solution of methylene blue, 1.1 cc. per kilogram, was followed by dramatic improvement. After several attacks and repeated hospitalization, it was realized that the only significant difference between hospital and home environment was the drinking water. The well water concerned was found to contain high nitrates and when another supply was substituted, no further difficulty was experienced.

Nitrates, when ingested, may be converted to nitrites in the intestinal tract through bacterial action. Nitrites are absorbed and convert hemoglobin to methemoglobin.

In 1918 Cornblath and Hartmann¹⁰ used human subjects in a thorough study dealing with the manner in which nitrates affect the body. They concluded that "only infants who have a gastric juice pH higher than 4.0 and nitrate reducing bacteria in the upper gastrointestinal tract develop methemoglobinemia from oral ingestion of water containing nitrate"; that "if nitrate is introduced into the colon (where nitrate reducing bacteria abound), methemoglobinemia develops readily"; that "the treatment of choice for the cyanosis is intravenous administration of methylene blue, 1.0 to 2.0 mg. per kilogram"; and that "the prevention of methemoglobinemia can be accomplished by adding lactic acid to the nitrate containing formula to inhibit bacterial growth in the upper gastrointestinal tract as well as by prohibiting the ingestion of nitrate."

In 1919 Donahoe¹¹ described 5 cases of methemoglobinemia in infants of 2 to 7 weeks of age who were exposed to a nitratebearing water supply. Mention was also made of 7 other cases, one of which was breast fed and received no water. In the latter case the mother was told to drink water from a nitrate free source and to drink no milk from cows using the nitratebear-

ing water. The baby recovered within a week and remained normal with no more blue spells.

Borts¹², in 1919, reported 14 cases of cyanosis associated with water supplies in which, at the time of analysis, the nitrate nitrogen ranged from 20.0 ppm to 0.4 ppm. In 2 additional cases no nitrates were detected in the water but no other cause of the cyanosis was apparent. The fact was noted, also, that shallow well waters vary greatly in nitrate content from time to time and one instance was cited in which the nitrate nitrogen content varied from 10 ppm to 70 ppm within a two weeks period. Many additional observations¹²⁻²⁰ have been reported by various authors in recent years.

During the latter part of March 1950 a sample of well water was submitted to the Georgia Department of Public Health Water Pollution Control laboratory by Dr. R. C. McGahee, Augusta, Georgia, with a request for nitrogen examination. Dr. McGahee sent a brief statement with the sample to the effect that a baby using the water was having periodic attacks of cyanosis which were unexplained. The analysis of the water revealed 7.5 ppm (parts per million) of nitrate nitrogen equivalent to about 33 ppm of nitrates. Drinking water from a municipal supply had been prescribed for the mother and baby and the attacks of cyanosis ceased.

Investigation by the author revealed that the above family lived on a farm in Screven County, Georgia, and that they had five children, the last two of whom were born after the family moved to their present location. For convenience this family is designated as Family A. The youngest child, age 2 months, was born in the Sylvania hospital and stayed three days, then came home but received no water from the open rope and bucket well for about four days. During this period the child was nursing. When about 2 weeks old the child began to have "blue spells and drowsiness". Although still nursing, it was also receiving some boiled water from the well. The child was taken back to the Sylvania hospital for examination but this revealed nothing since there was no evidence of cyanosis at the time and no other symptoms of illness. The parents were referred to Dr. McGahee in Augusta and the child developed cyanosis while in his office. Hospitalization and administration of oxygen were ordered and the child returned to normal in 18 to 24 hours. After remaining in the Augusta hospital six days no further symptoms developed and the child was released on March 1, 1950. The baby was brought back on March 10, 1950 with cyanosis. It was immediately hospitalized with the administration of oxygen and again returned to normal within 18 to 24 hours. This time the baby remained in the hospital with no further

symptoms until March 18, 1950 when it was released with instructions to the parents to change the drinking water of the mother and baby. The attacks of cyanosis did not recur.

The fourth child (now two years old) of Family A was also born while the family was residing on the same farm and was given water from the same well. This child was born in the hospital and began having periodic blue spells shortly after it was brought home. These attacks of cyanosis continued until the child was about 6 months of age when they ceased and have not returned. The cause of the attacks was never determined.

On March 29, 1950 an investigation of conditions on the farm of Family A as well as eight other farms in the immediate vicinity, was made. The area in question lies in the coastal plain section of Georgia where the Sunderlin formation outcrops adjacent to the Hawthorne formation. The soil surrounding all of the wells concerned is loose and sandy to about an 18 inch depth under which a 6 to 8 foot layer of stable clay and sand exists. Below that the formation is unstable and subject to caving. All wells concerned had some type of casing or shoring below the 10 foot depth. Static water levels in these wells varied from 3 to 15 feet below the ground surface.

Usually in the spring farmers in Georgia store a certain amount of commercial fertilizer in out buildings which are never far from the well. In handling, a certain amount of fertilizer is always lost on the ground in the storage area. Frequently the fertilizer sacks are washed in the wash pots, never far from the well, and the wash water is dumped on the ground. The nitrate radical in the well water may be derived either from commercial fertilizer or manure.

All of the wells were of open rope and bucket type with some type of curb. Samples of the water were obtained for nitrate analysis and brief notes were made relative to sanitation. One well contained only a trace of nitrate nitrogen, the other wells ranged from 3 ppm to 10 ppm with an average of about 6 ppm. The following brief comments relate to the well of Family A: Open rope and bucket well. Electric pump installed in pit to one side. Shed about 15 feet away periodically used for fertilizer storage. Slope from this shed is toward well. Earth floor in shed thickly covered with chicken manure. A manure laden chicken house was within 30 feet of well. The barn, hog pen and privy were about 100 feet from well. The nitrate nitrogen content of the water at this time was 7.0 ppm. Space does not permit descriptions of the other eight farms and wells.

The families living on these 9 farms were interviewed with respect to the occurrence of other cases similar to the one described above. Altogether, 6 babies had been called blue babies

during early infancy by physicians and, of these, 3 died during attacks of cyanosis before the age of 6 months. The oldest living child of this group is now 3 years old. Although the evidence relating to these cases is fragmentary and inconclusive, the high incidence of reported blue babies in the small area survey is of interest.

Reported observations stress the danger of feeding water containing nitrates to infants. This danger may be increased by prolonged boiling. Although it is desirable to destroy pathogenic bacteria by bringing the water to a brisk boil, continuous boiling for 5 to 30 minutes tends to concentrate the nitrate ion. The extent to which water supplies in Georgia are polluted by the nitrate radical is not known, but the results of this study appear to be sufficiently significant to warrant investigation of the situation on a statewide basis.

Acknowledgement: The author wishes to express his appreciation to Dr. R. C. McGahee, Augusta, Georgia for providing him with information relating to the case reported above. Appreciation is also expressed for the valuable assistance given by N. M. deJarnette, Public Health Engineer, Elizabeth McEntire, Bacteriologist, and W. H. Powell, Sanitarian.

REFERENCES

1. Barker, M. H., and O'Hare, J. P.: J.A.M.A. 91: 206, 1928.
2. Eusterman, G. B., and Keith, N. M.: M. Clin. North America, 12: 1489, 1929.
3. Roe, H. E.: J.A.M.A. 101: 352, 1933.
4. Marriott, W. M.; Hartmann, A. F., and Senn, M. J. E.: J. Pediat. 3: 181, 1933.
5. Hartmann, A. F.; Barnett, H. L., and Perley, A.: J. Clin. Investigation 17: 699, 1938.
6. Evelyn, K. A., and Malloy, H. T.: J. Biol. Chem. 126: 655, 1938.
7. Wendel, W. B.: J. Clin. Investigation 18: 179, 1939.
8. Schwartz, A. S., and Rector, E. J., Methemoglobinemia of Unknown Origin in a 2 Weeks Old Infant, Am. J. Dis. Child 60: 652, 1940.
9. Comly, H. H.: Cyanosis in Infants Caused by Nitrates in Well Water, J.A.M.A. 129: 112, 1945.
10. Cornblath, Marvin, and Hartmann, Alexis F.: Methemoglobinemia in Young Infants, J. Pediat. 33: 421, 1948.
11. Donahoe, Will E.: Cyanosis in Infants with Nitrates in Drinking Water as Cause, J. Pediat. 3: 308, 1949.
12. Borts, I. H.: Water-borne Diseases, Am. J. Pub. Health, 39: 974, 1949.
13. Johnson, G., et. al.: Nitrate Levels in Water from Rural Iowa Wells, J. Iowa M. Soc. 36: 4, 1946.
14. Faucett, R. L., and Miller, H. C.: Methemoglobinemia Occurring in Infants Fed Milk Diluted with Well Water of High Nitrate Content, J. Pediatrics 29: 593, 1946.
15. Ferrant, M.: Methemoglobinemia; 2 Cases in Newborn Infants Caused by Nitrates in Well Water, J. Pediat. 29: 585, 1946.
16. Medovy, H.; Guest, W. C., and Victor, M.: Water Supply: Cyanosis in Infants in Rural Areas (well water hemoglobinemia), Canad. M.A.J. 56: 505, 1947.
17. Weart, J. G.: Effect of Nitrates in Rural Water Supplies on Infant Health, Illinois M. J. 93: 131, 1948.
18. Waring, F. H.: Significance of Nitrates in Water Supplies, Jour. A.W.W.A., 41: 147, 1949.
19. Robertson, H. E., and Ruddell, W. A., Cyanosis of Infants Produced by High Nitrate Concentration in Rural Waters of Saskatchewan, Canad. J. Pub. Health, 40:72, 1949.
20. Bosch, H. M., et. al.: Methemoglobinemia and Minnesota Well Supplies, Jour. A.W.W.A., 42: 171, 1950.

FAMILY FARE

If housewives find the recipes in today's magazines take too much time, energy, and costly food items for their purpose they may find a new booklet printed by the Federal government a help. Its purpose is to help home-makers serve enjoyable meals, keep the family well nourished, practice thrift and save time and energy. "Family Fare Food Management and Recipes" is the name of the bulletin, and it can be secured from the Government Printing Office, Washington, D. C., for twenty-five cents.

NEWS ITEMS

Dr. John S. Atwater, Atlanta, was elected a member of the American Gastro-enterological Society at the annual meeting of the society held at Atlantic City, April 27-29.

* * *

The Baldwin County Medical Society held its regular meeting May 1. The guest speaker was Dr. D. F. Mullins, Jr., of Athens, who presented a very interesting program on the Rh factor. At the previous meetings, the following were guest speakers: In April, Dr. Iloke Wam-mock, of Augusta, spoke on "Early Diagnosis of Cancer." In March Dr. R. M. Reifler, of Macon, spoke on "Elementary Treatment of Skin Disorders." Dr. Robert D. Waller, Secretary.

* * *

Bibb County held its own on the health front in 1949 despite population increases. Dr. R. Frank Cary said recently. Dr. Cary's figures showed no marked hikes or drops in 1949 health figures compared with the totals for the previous year. His figures were taken from the Macon-Bibb County Health Center's annual report. Dr. Cary heads the Health Center. He said Bibb County's birth rate is "a good deal higher" than that of Georgia or the nation. A breakdown of death figures listed these ailments as the principal causes of fatalities: Cerebral hemorrhage, 157; coronary artery disease, 138; heart disease 98; cancer, 89; nephritis, 78; pneumonia, 71; accidents, 64; tuberculosis, 28; automobile accidents, 26; homicides, 15; suicides, 10; unknown, 79; and ill-defined, 67. The death rate in Bibb County is very near the national average. Dr. Cary summed up 1949 as a healthy year. He proudly pointed out that no malaria or typhus cases were reported, as compared with recent years when those diseases hit hard.

* * *

Dr. Long's Claims Sustained. Dr. Frank Kells Boland of Atlanta is the author of a book entitled *The First Anesthetic*, which has just been published by the University of Georgia Press.

Dr. Boland has evidently rendered a public service to the people of Georgia and indeed of the entire South by presenting convincing evidence that Dr. Crawford W. Long was the first person in history to make use of anesthesia in performing a surgical operation. The question has been in controversy for more than a hundred years. Opinion divided as almost entirely along sectional lines. The people of Georgia gave expression to their own opinion when they placed the statue of Dr. Long in Statuary Hall at Washington. Others in the South feel that an impartial examination of all the evidence proves that Dr. Long was entitled to the credit for the first use of this great humanitarian agency, anesthesia.

Dr. Boland claims that Dr. Charles T. Jackson is the "villain" in the piece. He shows that Jackson visited Georgia in connection with the gold mine operations at Dahlonega at about the time Dr. Long performed his first operation with the use of anesthesia. The author of this book feels that Jackson learned of Dr. Long's discovery and passed on the information to Dr. W. T. G. Morton, a Boston dentist who is sometimes credited with having been a pioneer in this field. Dr. Boland says that Jackson and Morton first tried to claim joint credit for the discovery and later that Jackson claimed it exclusively for himself.

According to Dr. Boland's book, Jackson was a vain and ambitious sort of person who claimed credit for the discovery of gun cotton and tried to take from Samuel F. B. Morse the credit of inventing the telegraph. He made many other fantastic claims which have as little foundation in fact.

The presumption would therefore be against Jackson in any case but Dr. Boland seems to have provided evidence which should settle this controversy for all time.—Editorial page of *The Macon Telegraph*, April 23, 1950.

* * *

The Warren A. Candler Hospital staff, Savannah, recently elected Dr. Walter E. Brown to succeed Dr. D. B.

MEETING OF THE OFFICERS AND COUNCIL

MEDICAL ASSOCIATION OF GEORGIA
ACADEMY OF MEDICINE
Atlanta, May 18, 1950

1. Call to order by Chairman W. G. Elliott.
2. Roll call by Clerk M. C. Pruitt of the Council. Present were: Drs. A. M. Phillips, W. F. Reavis, Leon D. Porch, T. A. Peterson, Edgar D. Shanks, Lee Howard, W. G. Elliott, J. W. Chambers, M. C. Pruitt, H. D. Allen, Jr., D. Lloyd Wood, Sage Harper, Bruce Schaefer. A quorum was declared present.
3. Discussion of prepayment medical care plans by Dr. W. S. Dorough, Atlanta.
4. Discussion of current public relations problems by Drs. Mason Lowance, Hal Davison, S. A. Kirkland, and J. C. Norris, all of Atlanta.
5. Executive session:
 - a. Further discussion of the public relations problem, after which it was voted that the present personnel of the public relations department vacate their positions but that the department be continued, that it be administered by the Executive Committee of the Public Relations Committee; namely, the President of the Association, the Chairman of the Council of the Association, the Secretary-Treasurer of the Association, the Chairman of the Committee on Public Policy and Legislation of the Association, and the Chairman of the Public Relations Committee of the Association; that \$15,000 be appropriated for the public relations department for the ensuing Association year; and that the activities of the public relations program be more closely tied to the activities of the office of the Association, all for the improvement of the public relations program and for the benefit of the Association as a whole.
 - b. After reviewing the current audit of the Association's finances, by Ernst & Ernst, Atlanta, and considering the costs for all current activities of the Association, it was voted that the dues for 1951 be \$15.
 - c. After discussion of the current needs of the Committee on Prepayment Medical Care Plans, the Secretary-Treasurer was authorized to pay the necessary bills incurred in the development of this program to and not to exceed \$1,000 for the ensuing Association year. In this connection, it was agreed that the final plan, as adopted by the Committee on Prepayment Medical Care Plans, would be submitted to the Council for approval before the plan was offered to the public.
6. Adjournment.

EDGAR D. SHANKS, M.D.
Secretary-Treasurer

Filligim as president of the group at the annual meeting. Dr. C. R. A. Redmond was elected to serve as vice president, and Dr. Anne Hopkins, was re-elected secretary. Dr. Jacob Rubin is the outgoing vice president.

* * *

Dr. Raymond S. Crispell, Atlanta psychiatrist, was guest speaker at the meeting of the Savannah Mental Hygiene Society in the Gold Room of the Hotel DeSoto, Savannah, May 8. Dr. Crispell spoke on "The Community and the Psychiatrist". Now chief of the neuropsychiatry division of the Southeastern area of the Veterans Administration, Dr. Crispell also serves as consultant in mental hygiene to the Georgia Institute of Technology.

* * *

Dr. Walter W. Daniel, Atlanta, past-president of the Fulton County Medical Society, was elected president of the Atlanta Wofford College Alumni Club at the dinner meeting April 21.

* * *

Emory University School of Medicine and its Alumni Association, Atlanta, recently published a medical alumni directory, the first of its kind published at Emory. Whatever-became-of-old-Joe is answered for 2,733 alumni of Emory. The directory was mailed to doctors in 41 States, 830 towns, and 17 foreign countries, and carried with it the name, address, specialty, and class year of all practicing graduates. Names are given according

FACULTY APPOINTMENTS AT EMORY

The appointment of Dr. F. William Sunderman as professor of clinical medicine at Emory University was announced recently by Dr. Goodrich C. White, Emory president.

Dr. Sunderman, whose appointment is effective immediately, recently came to Atlanta to head the section on clinical pathology in the communicable disease center of the U. S. Public Health Service. He is a former member of the board of governors of the College of American Pathologists, and is president-elect of the American Society of Clinical Pathologists.

Other appointments in the medical school are Dr. Martin Frobisher, Jr., Dr. Alexander D. Langmuir, Dr. Richard E. Felder, Dr. Elizabeth Gambrell, Dr. Lee N. Cordrey, Dr. David James Hughes, Dr. Robert F. Mahon, Dr. Irvin Trichter, and Aloysius L. Miller. Miss Helen Goodroe was appointed instructor in nursing.

New professors announced in the College of Arts and Sciences are Dr. Joseph M. Conant, assistant professor of classics; Dr. Granville B. Johnson, assistant professor of education; William Franklin Ingram, instructor in geology; and Richard F. Maher, instructor in speech. These appointments are effective in September. Dr. Conant will come to Emory from a position as instructor in Latin and Greek at Columbia. Dr. Johnson is now a member of the faculty at Arizona State College. Maher is a graduate clinician with the Wayne University Speech clinic. Ingram, an Atlanta and Emory graduate, is a research associate in the Emory geology department.

to geographic location, followed by an alphabetic cross-index. According to the listing, three-fourths of Emory's medics are serving in the Southeast. Georgia takes the lead with 1,258 alumni at work. Florida has 380; Alabama, 202; North Carolina, 102; South Carolina, 94; Mississippi, 65; Tennessee, 71; Louisiana, 34. Others are scattered throughout the United States, and as far as Hawaii, West Africa, and Korea. Named in the directory are graduates of the Atlanta Medical School in 1915. Among them is one from the class of 1892, Dr. William Stokes Goldsmith, retired, of Stone Mountain. The total number in general practice is 1161, or 42 per cent. Other Emory medical graduates are found in such specialties as surgery, internal medicine, and public health. The directory was compiled as a cooperative project by the Emory publications office, alumni association, and school of medicine.

* * *

Dr. Robert G. Ferrell, who has served as a physician in Duhlin since 1936, has moved to Macon and is now located in the Professional Building, Macon, where he will do surgery and general practice.

* * *

The Georgia Chapter of Ophthalmology and Otolaryngology, at the annual luncheon and business meeting held at the Hotel Dempsey, Macon, April 20, elected Dr. Braswell E. Collins, Waycross, president. This meeting was coincident with the annual session of the Medical Association of Georgia. Other officers elected were Dr. Thomas S. Harbin, Rome, vice president, and Dr. W. E. Matthews, Augusta, secretary-treasurer. Dr. Lester A. Brown, Atlanta, is retiring president of the organization numbering approximately 250 doctors. Dr. William A. Barton, Macon, retired as vice president. Dr. Collins is the former secretary-treasurer. The annual scientific session will be held at the General Oglethorpe Hotel, Savannah, March 2 and 3, 1951.

* * *

The Georgia Department of Public Health held its twenty-first annual meeting at the Hotel DeSoto, Savannah, May 1-3, with more than 750 public health officials, doctors, and nurses attending. National authorities on child and public health were guest speakers. Speakers included Dr. Harold Hillenbrand, executive secretary of the American Dental Association in Chicago; Dr. John R. McGibony, medical director, division of medical and hospital resources of the U. S. public health service; Dr. Leona Baumgartner, assistant chief of the Chil-

dren's Bureau in Washington, Dr. Evan Thomas, director of the Bellevue Hospital rapid treatment center and a professor at New York university; Dr. Clair E. Turner, assistant to the president, National Foundation for Infantile Paralysis, Inc., New York; Dr. H. G. Baity, professor of sanitary engineering at the University of North Carolina; Gov. Herman Talmadge, and Dr. T. F. Sellers, head of the Georgia Department of Public Health. Dr. C. D. Bowdoin, Atlanta, was elected president of the association, succeeding Dr. J. A. Thrash, of Columbus. Other officers elected were Miss Bessie Swann, Atlanta, president-elect; Dr. John Venable, Griffin, vice president; C. S. Buchanan, Atlanta, secretary, and Ernest B. Davis, Atlanta, treasurer. The convention voted to hold its meeting in Savannah again next year for the fourth consecutive time.

* * *

Dr. I. S. Giddens, Lakeland, will manage the Louis Smith Memorial Hospital, Lakeland. Dr. Giddens was born and reared in Lanier County and graduated from University of Georgia School of Medicine, Augusta, in 1933. He practiced medicine in Adel before going to Lakeland in January, 1949.

* * *

The Glynn County Medical Society held its meeting in Brunswick, May 17. A prepared study on "Ulcers of the Stomach" was presented members of the society. Physicians leading the discussion were Dr. Mack Simmons, Dr. H. L. Moore, Dr. A. N. Galin, Dr. V. Kanauka, and Dr. T. V. Willis, president of the society. Dr. T. H. Johnston, secretary.

* * *

Dr. J. Harold Harrison, Wrightsville, was recently named to the Johnson County Board of Health for a four-year term, beginning immediately, by the grand jury of the March term of Superior Court. The County Board of Health is made up of a doctor named by the grand jury, the county school superintendent, and the chairman of the Board of County Commissioners.

* * *

Dr. Clair A. Henderson, Savannah, city-county health officer, recently conducted an open forum at the Isle of Hope Community Club on the subject of "Health Problems of the Isle of Hope Community."

* * *

Dr. Marcus L. Howard, Ellaville physician, and formerly of Dawsonville, announces the opening of his offices in Dahlonega for the practice of medicine. He is a graduate of George Washington University School of Medicine, Washington, D. C., and also Washington School of Law, a veteran of World War II, serving in the Pacific theatre of operations. He spent a year at the Naval Air Station, Atlanta, and was elevated to Lieutenant Commander and is now a naval reserve officer. Following his release from the Navy, he practiced medicine in Dawsonville and served one term in the Georgia Legislature.

* * *

Dr. Steve P. Kenyon, Dawson physician, was recently honored by Dawson Rotary Club at its regular luncheon at Standley-Oxford Club. He was unanimously elected an honorary member, following his resignation as an active member because of his health. Dr. Kenyon is one of the charter members and first president of the Dawson Rotary Club. President Ed Stevens paid glowing tribute to the esteemed doctor who was instrumental in organizing the Rotary Club six years ago. Dr. Kenyon is retiring temporarily from active practice of medicine on advice of his physician. In addition to president, Dr. Kenyon has served the club in many capacities and was chairman of the classifications committee, Rotary's most important body. Dr. Kenyon expressed his appreciation to the club for its action and said he was grateful for the privilege of serving the club.

* * *

Dr. Milton H. Freedman, Atlanta, announces the removal of his office to 21 Eighth Street, N. E., Atlanta. Practice limited to internal medicine and hematology.

TEN COMMANDMENTS FOR GOOD SLEEPING

1. Go to bed at the same hour every night.
2. Try to get at least one hour of sleep before midnight (Yes, you can!).
3. Eat no more than a glass of milk or a small bowl of cereal before retiring. Leave those crab cakes alone.
4. Never eat or drink ice cold foods before retiring. Ice cream is the worst kind of midnight snack.
5. Never listen to the radio in bed. (I know the radio can put you to sleep, but it can also wake you.)
6. Never, positively never, read in bed.
7. Provide a regular schedule for the hobby, dog, wife or husband who interferes with your rest.
8. When you go to bed, close your eyes and go to sleep.
9. If that doesn't happen, try to remember what position you awake in the next morning. Then take that position when you go to bed that night.
10. Relax every nerve, muscle and thought. Patience won't kill you; sleeping pills may.—*Paul H. Fluck, M.D., in TODAY'S HEALTH.*

The Fulton County Medical Society held its semi-monthly dinner meeting at the Academy of Medicine, Atlanta, May 18. Scientific program: Dr. James H. Byram, moderator. "Recent Advances in Treatment of Urinary Infection." Dr. Harold McDonald. Drs. Reese C. Coleman, Jr., James H. Semans and H. B. Stillerman discussed the paper. "Uses and Abuses in Glandular Therapy." Dr. J. K. Fancher. Greetings by Dr. J. F. McCahan, Chicago, assistant secretary of the Council on Industrial Health of the American Medical Association. Guests of honor were the members of the Cobb County Medical Society.

* * *

The Kennestone Hospital, Marietta, was dedicated May 22 as Governor Herman Talmadge paid tribute to city, State and Federal authorities for creating reality from a dream. Some 7,000 Georgians attended the dedication of the \$1,500,000, 105 bed hospital by Governor Talmadge, who had warm praise for the late John Ransom, director of the state division of hospital services, who died only three days before the Kennestone dedication as the result of an automobile accident. Other speakers included Dr. T. F. Sellers, Atlanta, director of the Georgia Department of Public Health; Walter A. Altmann, hospital administrator; William L. Harris, of the authority; Mayor Sam Welsch of Marietta, and Rep. Harold Willingham, who introduced Governor Talmadge.

* * *

The Macon Hospital Tumor Clinic, Macon, leads the State in number of cancer patients treated. The State of Georgia spent \$34,000 in 1949 to fight cancer and part of that money went to the Macon Clinic, which serves 17 counties. Dr. Thomas Harrold, Macon physician, is clinic director; other members of the staff are Drs. Milford B. Hatcher, assistant director, R. W. Reifer, Jule C. Neal, Charles McLaughlin, William Barton and Earl Lewis, all of Macon. Operating under the state cancer program, the clinic services are "free" for persons unable to pay.

* * *

The Bibb County Medical Society held its dinner meeting at the S & S Cafeteria, Macon, May 2. Program: "Malpractice." Dr. Frank Eskridge, Atlanta, lecturer in forensic medicine, Emory University. Dr. Henry H. Tift, secretary.

* * *

The senior class of the Medical College of Georgia, Augusta, graduated 78 new doctors this year, with the baccalaureate address delivered by Dr. R. C. McGahee, Augusta, at the Municipal Auditorium, June 5. The senior class had 79 members but the death of one of the young doctors, Stanley McCarty Robinson, Savannah, on March 4 reduced the number to 78. A diploma was conferred posthumously for Robinson at the exercises. In the class of 78, six were women.

The Medical College of Georgia, Augusta, announces the Seventh Graduate Course in Endocrinology which will be given September 4-9, inclusive. The course is offered as a refresher and guide in those aspects of basic endocrinology which have practical and clinical application. The lectures will deal with endocrine problems which arise in everyday practice and are designed for the practicing physician. Registration is limited to fifty. Enrollment is open to all qualified physicians. Applications should be addressed to the Registrar, Medical College of Georgia, Augusta, Ga.

* * *

Drs. Roger W. Dickson, William Friedewald, and David Henry Poer, all of Atlanta, were recent dinner guests of the Tanner Memorial Hospital, Carrollton, where they read papers before the regular meeting of the Carroll-Douglas-Haralson Medical Society.

* * *

Dr. Lewis W. Moore, formerly of Atlanta, announces the opening of his offices at 310-312 Peoples Bank Building, Winder, for the practice of medicine and surgery. He is associated with Dr. E. R. Harris.

* * *

The Medical College of Georgia, Augusta, in cooperation with the Medical Association of Georgia, conducted a postgraduate course for general practitioners June 20, 21 and 22. Dr. G. Lombard Kelly, president of the medical college announced. The course, given annually, is a refresher course and is designed, said Dr. Kelly, to present new as well as accepted methods of diagnostic and therapeutic procedures in general practice. Attendance of the course met in part the requirements for membership in the American Academy of General Practice. The fee for the course was \$15, which included three luncheons during the three-day courses. The program included lectures on many phases of medical practice of special interest to the practicing physician.

* * *

Dr. Michael V. Murphy, Jr., Atlanta, announces the removal of his office for the practice of internal medicine to 21 Eighth Street, N. E., Atlanta.

* * *

Dr. C. T. Nellans, Atlanta, is the chief medical officer of the Veterans Administration Regional Office, 105 Pryor Street, N. E., Atlanta. He succeeds the late Dr. J. A. McAllister.

* * *

Dr. J. H. Nicholson, Madison, recently assumed his duties with the United States Army, as a member of the medical staff of Fort Benning, Columbus. Since his release from World War II, Dr. Nicholson has been a practicing physician in Madison and Morgan County. He has also served on the surgical staff of McGeary Hospital, Madison and the Minnie Boswell Memorial Hospital, Greensboro. He will serve at Fort Benning for a period of three months, at which time further orders will be issued.

* * *

Dr. Perrin Nicolson, Atlanta, was guest speaker before the Cornelian Corner in Detroit, Michigan, in April; subject "Breast Cancer, Its Incidence and Relationship to Lactation."

Dr. Nicolson recently addressed the staff of the Minnie Boswell Memorial Hospital, Greensboro. His subject was "Breast Lesions."

* * *

Dr. Irving Greenberg, Atlanta, was recently guest speaker at the Walton County Medical Society, Monroe. His subject was "What the Red Cross Blood Program Can Mean to You and Your Community."

* * *

Dr. Thomas J. Peacock, Milledgeville, superintendent of the Milledgeville State Hospital, was guest speaker to the students of the Atlanta division, University of Georgia, in the sixth floor assembly room, April 21. He discussed "How to Keep a Sound Mind."

* * *

Dr. David Henry Poer, Atlanta, was guest speaker at the dinner meeting of the Jefferson County Medical

Society held at the Country Club, Birmingham, Ala., May 15. His subject was "Carcinoma of the Thyroid."

* * *

Dr. Samuel R. Poliakoff, of Abbeville, S. C., has been appointed assistant of obstetrics and gynecology on the staff of Emory University Hospital, Atlanta. He graduated from the Medical College of the State of South Carolina, Charleston, and served his internship at Grady Memorial Hospital, Atlanta, and has received a fellowship at Harvard Medical School, Boston, Mass. He served in the Pacific area during World War II.

* * *

Dr. J. C. Patterson, of Patterson Hospital, Cuthbert, was the interesting Rotary speaker at the luncheon meeting on May 3. Dr. Patterson described some of the results of the use of the famed "steel pin" for holding bone fractures in place and effecting a cure without stiffness of joints or deformity. He exhibited specimens of the stainless steel rod used for this purpose and showed actual x-ray pictures revealing the manner in which the pin is used and follow-up pictures showing the cured fracture, when the bones have reknit. He explained several methods of the treatment, the Rush method being the one he uses. The ability of the patient to walk within a day or so after the operation was emphasized, also the fact that the patient has perfect use of the injured member and no pain. The method can be used for leg bones and arm bones as well, Dr. Patterson explained.

* * *

Dr. Joseph Read and Dr. Perrin Nicolson, of Atlanta, recently attended the meeting of the Southern Society of Clinical Surgeons held in Detroit and Ann Arbor, Michigan. Dr. Nicholson was president of the society this year. At this meeting Drs. Duncan Shepard and Charles Jones, of Atlanta, were elected to membership.

* * *

Dr. Lee Rogers, of Gainesville, was recently re-elected chairman of the State Board of Health and increased the ratio of state funds in a federal-state local hospital building program. Meeting at Alto State Hospital, the board set up a hospital program for the next fiscal year with the Federal Government paying 55 per cent of the cost, the state 25 per cent, and local sources 20 per cent. The \$12,000,000 program for 1950-51 is being worked out now under changed priorities.

* * *

Seven doctors from the Medical College of Georgia recently presented papers at the annual convention of the Federation of Societies of Experimental Biology in session at Atlantic City, N. J. They were: Drs. W. F. Hamilton, Jr., Philip Dow, J. W. Pennington, Virginia Sydow, W. Knowlton Hall, Sam Singal and Ray Pickering. The convention of the federation was attended by physiologists, pharmacologists, biologists and kindred lines of the medical profession.

* * *

Dr. Sterling Rogers, of Coleman, recently visited Dr. Sterling Jernigan, of Sparta. Both were schoolmates at the old Atlanta Medical College and have been practicing medicine for 50 years. Both have a son named "Sterling". Dr. Sterling Jernigan is practicing medicine in Atlanta, and Dr. Sterling Rogers in Washington, D. C.

* * *

Dr. Harriet E. Gillette, Atlanta, specialist in the cerebral palsy field of medical science, conducted Savannah's first diagnostic and treatment clinic for cerebral palsied children at the Chatham-Savannah Health Center, May 26-27. The clinic serves the entire first congressional district. Attendance at the clinic is free of charge. Children needing braces were measured and fitted at the clinic. They educate cerebral palsied children and put them on the road to becoming self-sufficient children.

* * *

Dr. Richard Torpin and his staff at the University Hospital, Augusta, recently conducted a surgical clinic at the hospital for members of the South Carolina Obstetrical and Gynecological Society at their annual meeting held in Augusta. Papers by Drs. Frank B. Giebel, of

WHY A CASE HISTORY?

The mental attitude of a patient in the course of a physical examination is most important. Yet many people overlook this, theorizing that it is the physician's job to locate the source of the ache or pain, the Educational Committee of the Illinois State Medical Society observes in a *Health Talk*.

Actually this is true, but the cooperation of the patient is essential in providing information that will assist the physician in establishing a diagnosis. That is why a complete case history is important.

Frankness on the part of the patient is imperative. Being secretive serves no purpose whatsoever except to obscure facts that might be helpful. To deny a history of tuberculosis in the family, for example, defeats the purpose of the examination. This is true, of any other condition, whether it be mental or physical.

For this reason, a person should select a physician to whom he can speak freely without being self-conscious. He should trust his physician, knowing that his confidence will not be misplaced. In explaining his physical aches and pains, the individual should also account for the fears, worries, resentments and other emotional attitudes that characterize almost every human being.

Sometimes it takes years for a patient to speak frankly of these emotional attitudes, incorrectly believing that they don't fit into the picture of a complete case history. A person may complain constantly of various pains, yet attempt to obscure the awareness of noticeable personality changes about which he was worried.

The physician is a trained observer and the person who is evasive in explaining his history is fooling no one but himself. Very often, it is necessary for the physician to probe verbally and adroitly to evoke a single honest reply to a question that may have a profound influence on the person's ailment.

All emotional upsets should be recalled, even though they are long past. A person may not wish to admit an unhappy love affair, the brooding over the death of a loved one, or the disappointment of defeat in business, but these incidents are important to the physician in taking your case history. They may shed light on the physical discomfort, particularly when laboratory and other tests are negative.

There is no point in withholding such information from your physician. It is much like dropping a watch. Even though it is still ticking, it does not indicate that a piece of the machinery was not jarred. It might stop a week or a month later. So it is with the human body. In a physical condition where heredity is a factor the tendency is there. And concealing the fact does not necessarily mean that it has not left a mark somewhere on the path of our nervous system.

While a regular examination is recommended, don't ignore symptoms that may develop in the interim. Symptoms are warning signals and it is wise to heed them.

So help yourself first of all by selecting a physician you can talk to easily, and remember that frankness is important in providing a complete medical history.

Columbia. Frank Woodruff, of Greer, and William H. Bateman, of Greenville, were read during the scientific session. Dr. J. Dechard Guess, of Greenville, is president, and Dr. Henry W. DeSaussure, of Charleston is president-elect.

* * *

Dr. T. O. Vinson, Decatur, former Spalding County health commissioner and now health commissioner of DeKalb County, and his health department recently sponsored a health survey, giving free health tests for six diseases to residents of DeKalb County. A group of DeKalb county citizens formed a DeKalb Citizens Committee to help Dr. Vinson make the program a success.

* * *

The Southern Medical Association, with headquarters in Birmingham, Ala., will hold its forty-fourth annual meeting in St. Louis, Mo., November 13-16, upon the invitation of the St. Louis Medical Society. On the scientific program there will be four general sessions

COMMUNICATION
AMERICAN MEDICAL ASSOCIATION

Chicago 10, April 27, 1950

To: The Secretary or Executive Secretary of the state or county medical society

I am enclosing herewith marked copies of the questionnaires being used in the survey of physicians' incomes—a joint undertaking of our Bureau of Medical Economic Research and the United States Department of Commerce.

1. The white questionnaire is the short-form (only 1949 income) schedule which is being sent to 100,000 physicians and for which there will be no follow-up.

2. The buff colored questionnaire is also the short-form schedule and is being sent to 10,000 physicians with his code number of the Bureau of Medical Economic Research on the outside of the return envelope. The sole purpose of the code number is to enable the Bureau to address follow-ups to those physicians who do not reply to the first, second, or third request. An attempt will be made to obtain replies from all physicians who receive the buff colored questionnaire.

3. The green questionnaire is the long-form schedule (that is, it requests more information and for four more years, 1945-48) which is being sent to 15,000 physicians with his code number of the Bureau of Medical Economic Research on the outside of the return envelope. Again, the sole purpose of this code number is to enable the Bureau to address follow-ups to those who do not reply to the first, second, or third request. Also, an attempt will be made to obtain replies from all physicians who receive the green colored questionnaire.

I thought it would be helpful for you to have a copy of each of these three schedules because you may be asked about them. You understand that no physician will get more than one of these three schedules. Furthermore, approximately three physicians out of eight will receive none.

I hope that you will urge physicians in your society to fill out these schedules which have been prepared by our Bureau of Medical Economic Research and the Department of Commerce. This study bids fair to become the most comprehensive ever made of the incomes of a profession. I hope that you will especially urge your members with small practices to reply in full, as I am informed that earlier surveys of physicians' incomes have not obtained a representative number of responses from physicians with small practices. A fine response from every physician who receives a questionnaire will help to correct certain misinformation regarding physicians' earnings and expenditures by the American people for the service of physicians.

Sincerely,

GEO. F. LULL

covering the broader aspects of medicine and thirty-two section sessions covering every specialty. Members of the state and county medical societies in the South are eligible for membership in this Association, and are invited to attend the St. Louis meeting. There is no registration fee for members of the Southern Medical Association. Dr. Olin S. Cofer, Atlanta, is one of the councilors of this Association.

* * *

The Ware County Medical Society held its meeting in the office of Dr. H. T. Adkins, Ware County commissioner of health, Waycross, April 6. Dr. Harold W. Muecke presided over the meeting. Dr. Albert S. True-lock, Jr., Veterans Administration, Pinellas, Fla., was received into membership of the society. Dr. William H. Hendry, president of the Ware County Medical Society and his wife, Dr. Katherine Hendry of Blackshear, will be hosts to the May meeting of the medical group.

* * *

Dr. W. D. Willcox, Fitzgerald, and Dr. William Sams, Macon, announce their association with Drs. Herman L.

Dismuke and G. W. Willis in offices at the Ocilla Hospital, Ocilla, for the practice of medicine and surgery.

* * *

The Washington Clinic Building on Spring Street, Washington, owned by Dr. A. W. Simpson, Jr., was recently opened to the public when hundreds of Washingtonians showed great interest in seeing these very modern doctors' offices. The building is heated by the ray system and is air-conditioned. Identical equipment and all modern conveniences are offered in the clinic to white and colored patients.

* * *

Dr. Charles Edward Wills, Sr., Washington surgeon, has been notified of his acceptance as a Fellow of the International College of Surgeons, with headquarters at Geneva, Switzerland. The notice was in the form of an unusually beautifully designed diploma, and Dr. Wills' many friends in Washington and throughout Georgia will learn with pleasure of this recognition of his years of outstanding work in the field of surgery. The International College of Surgeons was founded in Geneva in 1935, and on its roster are the names of eminent surgeons from all parts of the world.

* * *

Three Griffin physicians are conducting a clinic at Hampton. The participating physicians are Drs. Abe Oshlag, William King and Harry King. The clinic has been in progress for some time, with at least one of the three doctors visiting Hampton every afternoon in the week. Appointments are made with a receptionist for the afternoon visits of the physicians.

* * *

Dr. M. E. Winchester, Brunswick, Glynn health commissioner and City Hospital administrator, was the featured speaker of the Rotary Club at its luncheon meeting April 26. He said Brunswick and Glynn County should give serious consideration to the idea of building a new hospital. He told the Rotary Club that he believes an appropriation for such a project would be approved by the group in charge of the program made possible by the Hill-Burton Act during the fiscal year beginning July 1. If a \$1,000,000 hospital should be erected, he pointed out, the cost for the local government would be only \$200,000. "I am not saying that the community should build a new hospital," he declared. He said, however, he felt obligated to advise local citizens of the opportunity which now presents itself.

* * *

Dr. Wallace E. Winter, Augusta, has resigned as acting director of the Gracewood Training School for Mental Defectives, Gracewood, and will go to the Orange Memorial Hospital, Orlando, Fla., as resident physician to continue his medical training, he recently announced. Dr. Winter, who took over the direction of the Gracewood school last year at the age of 23 years, stated that although he liked the work at that institution he felt that it is desirable for a physician to supplement his training as much as possible.

* * *

Dr. Peter B. Wright, Augusta, professor of orthopedic surgery of the Medical College of Georgia and district orthopedist for the Crippled Children's Division of the State Department of Welfare, talked to members and friends of the Augusta Area Chapter for Cerebral Palsy, on the role of orthopedic surgery in the treatment of cerebral palsy. He appealed to the group and community to continue the work under way and to secure financial aid for the vital cerebral palsy program. Dr. Wright spoke briefly but emphatically of the role of preventive medicine in cerebral palsy, mentioning specifically proper and adequate obstetric and pediatric care. Relative to the corrective aspects of medical care, Dr. Wright stressed the importance of early treatment in order best to attain the ultimate goal of independence for each individual child. Operations by orthopedic surgeons have proved of special benefit to youngsters suffering from the spastic type of cerebral palsy and consist of operative procedures on bones, joints, capsules about

the joints, muscles, tendons and nerves. It also comes within the province of the orthopedist to prescribe corrective braces, so necessary in the treatment of many cerebral palsied children. Following his most helpful talk, it was announced that Dr. Wright has accepted the chairmanship of the Medical Advisory Committee for the Augusta Area Chapter. Dr. Wright named to the committee Dr. Marion Estes, psychiatrist and Dr. R. C. McGhee, pediatrician.

* * *

The annual Postgraduate Course for General Practitioners given by Emory University School of Medicine in cooperation with the Medical Association of Georgia has been scheduled for the week October 9-13, 1950. If you plan to attend and have in mind any topic you would like to have discussed, please send it to: Director of Postgraduate Education, Emory University School of Medicine, 36 Butler Street, S. E., Atlanta 3, Georgia. A completed program will be published in the September issue of the Journal of the Medical Association of Georgia and also sent to each member of the Association.

* * *

The Georgia Medical Society held its regular meeting at 612 Drayton Street, Savannah, May 9. Program: "Breast Feeding," Dr. Howard J. Morrison. Dr. Sam Youngblood, Jr., secretary.

* * *

The Jonte Equen Memorial Lecture was delivered at the Fulton County Medical Society, Academy of Medicine, Atlanta, on June 15 by Dr. Hermon Marshall Taylor, noted Jacksonville, Fla., otolaryngologist, on the "Hygiene of Swimming", a subject of vital interest both to laymen and medical men. Dr. Taylor used a film to illustrate the lecture.

Dr. Murdock Equen, Atlanta, established the lecture-ship some years ago in memory of his father, the late Jontic Equen, a New Orleans grain broker.

OBITUARY

Dr. Jesse Lee Howell, aged 59, practicing physician of Atlanta and Georgia for many years, died at his home, 915 East Rock Springs Road, N. E., Atlanta, April 25, 1950. Born in Canton, Dr. Howell was a graduate of the Georgia College of Eclectic Medicine and Surgery, Atlanta, in 1913. He did postgraduate work at Tulane University of Louisiana School of Medicine, New Orleans. He formerly held memberships in the Fulton County Medical Society, the Polk County Medical Society, the Medical Association of Georgia, the American Medical Association, the State Board of Medical Examiners, and the Georgia National Guard. He was a veteran of World War I; was a member of the American Legion, a Mason, and a member of the Baptist Church. Surviving are his wife; two brothers, John C. Howell and Homer Howell, of Canton, and sister-in-law, Mrs. Helen Peek, Atlanta. Funeral services were held at Spring Hill. Burial was in West View Cemetery, Atlanta.

* * *

Dr. Edwin Lankin Jelks, aged 76, retired Quitman physician, died at the Brooks County Hospital, Quitman, April 27, 1950. He was the son of the late Mr. and Mrs. Nathaniel P. Jelks, of Hawkinsville. He graduated from Bellevue Hospital Medical College, New York City, in 1896, and served his internship at Brooklyn Hospital. In Quitman, Dr. Jelks was associated with his uncle, the late Dr. E. A. Jelks, in the practice of medicine. He had served as mayor of Quitman in two different terms. He was an honorary member of the Brooks County Medical Society, the Medical Association of Georgia, and the American Medical Association. He is survived by his wife, the former Miss Alma Allbritton; two sisters, Miss Ruth Jelks, Waycross, and Mrs. Dave McGriff, Hawkinsville, and several nieces and nephews. Funeral services were held at the residence on North Court Street, with the Rev. F. H. McElroy and the Rev. C. C. Kiser officiating. Burial was in West End Cemetery, Quitman.

Dr. William Marshall Shepard, aged 81, beloved Adel physician for many years, died at the Clinic, April 26, 1950. He was born in Winder, and graduated from the Southern Medical College, Atlanta, in 1892. He had practiced medicine for 55 years and retired from active practice several years ago. He was among the Georgia physicians honored at the Savannah session of the Medical Association of Georgia for having practiced medicine for 50 years or more. He had long been a devout member of the Methodist Church. He was twice married, both wives having preceded him in death. Surviving are four sons, Edgar Shepard, Atlanta; Earl Shepard, Richmond Hill; Paul Shepard, Adel, and Wm. A. Shepard, Atlanta; a daughter, Mrs. Alene Shepard Ross, Atlanta; a brother; two sisters; six grandchildren and one great-grandchild. Funeral services were held at the Adel Methodist Church. Burial was in Sparks Cemetery.

* * *

Dr. P. A. Tatum, aged 68, Columbus physician and surgeon, died at the City Hospital, Columbus, April 2, 1950. He graduated from the Atlanta College of Physicians and Surgeons, Atlanta, in 1905. He moved to Columbus from West Point in 1909, two years after he started to practice medicine, and had practiced in Columbus for 40 years. He retired 10 months ago because of ill health. In addition to membership in medical societies, Dr. Tatum was a member of the Masonic Order and of the Shrine. He was a member of St. Luke Methodist Church. Surviving are his wife, the former Miss Elward Whitaker; two brothers, M. M. and Ferrell Tatum, West Point; a sister, Mrs. R. A. Ridgway, Monticello, Fla., and several nieces and nephews. Funeral services were held at the home, 1220 Sixteenth Avenue, with the Rev. W. Howard Ethington officiating. Burial was in Pinewood Cemetery, West Point.

PLASTIC SURGERY AWARD

The Foundation of the American Society of Plastic and Reconstructive Surgery offers as its 1950 award \$500.00 (first prize of \$300.00, and second prize of \$200.00) and a Certificate of Merit, for essays on some original unpublished subject in plastic surgery.

Competition shall be limited to residents in plastic surgery of recognized hospitals and to plastic surgeons who have been in such specific practice for not more than five years.

The first prize essay will appear on the program of the forthcoming annual meeting of the American Society of Plastic and Reconstructive Surgery, to be held in Mexico City, November 27-29, 1950. Essays must be in before August 15, 1950.

For full particulars write the Secretary, Dr. Clarence R. Straatsma, 66 East 79th Street, New York, N. Y.

EXAMINATIONS ANNOUNCED FOR MEDICAL OFFICER

(Rotating Intern and Psychiatric, Surgical and General Practice Resident)

In the enclosed announcement are described examinations for positions of Medical Officer (Rotating Intern and Psychiatric, Surgical, and General Practice Resident) in St. Elizabeths Hospital, Washington, D. C. We will greatly appreciate your cooperation in helping us to bring these examinations to the attention of qualified persons who might be interested in applying.

Salaries for rotating intern are \$2,200 the first year and \$2,400 the second year; for psychiatric resident and general practice resident, from \$2,400 to \$4,150 a year; and for surgical resident, from \$3,400 to \$4,150 a year. To qualify for these positions, all applicants must have had appropriate education in an approved medical school. Applicants for psychiatric, surgical and general practice resident must also have completed a 1-year internship. In addition, applicants for surgical resident appointments must have completed a 3-year residency in surgery. No written test will be given.

We will be glad to send announcements and applica-

tion forms to any persons whose names are referred to us or to those who write direct to this office. Information and applications may also be obtained at most first- and second-class post offices and from Civil Service regional offices. Applicants should be sent to the Committee of Expert Examiners, St. Elizabeths Hospital, Washington 25, D. C. They will be accepted until June 20, 1950.

PSYCHOLOGIST GIVES REQUIREMENTS IN SCHOOL LIGHTING

Certain basic requirements in school lighting are advised by Miles A. Tinker, Ph.D., professor of psychology at the University of Minnesota, Minneapolis, in a report to the Council on Physical Medicine and Rehabilitation of the American Medical Association.

Dr. Tinker's report appears in the May 27 *Journal of the American Medical Association*.

"In prescribing illumination for any school, one should coordinate the intensity and distribution of light with the decoration," he says.

"Several illuminants, varying in character, are available. Variation usually is accompanied with some changes in color of the light. The more common artificial illuminants are tungsten filament incandescent light, mercury arc light and fluorescent light.

"In ordinary seeing situations such as found in schools, efficiency of seeing is just as good under one as under any other of the illuminants. Researchers of Harvard University claim that the quality of light derived from fluorescent lamps, no matter what combination of colors is used, is both unpleasant and distracting to workers in reading rooms.

"A recently devised fluorescent tube (soft white) appears to yield less disagreeable light. Under the light of many of the fluorescent tubes, colors in decoration tend to go 'flat' and the colors of objects frequently are altered in appearance.

"The following points will aid in eliminating undesirable distribution of illumination and brightness in the school: 1. Avoid bright peripheral light sources, such as low-hanging fixtures; 2. Avoid as far as possible the use of glazed paper, highly polished desk tops and other working surfaces; 3. Avoid any marked changes in brightness from one area to another; 4. Keep the surface brightness of light fixtures in the field of vision within the limits suggested herein; 5. Maintain, in general, as even a distribution of light as possible over work surfaces."

FIND NEW ANTIBIOTIC DRUG EFFECTIVE AGAINST BACTERIAL AND VIRUS DISEASES

Medical research reports on a new antibiotic drug, terramycin, indicate that it is effective against whooping cough, several kinds of pneumonia, syphilis, gonorrhea and other diseases.

Early clinical trial of the drug is described in two articles in the May 6 *Journal of the American Medical Association* by two Washington, D. C., research groups.

Terramycin is produced by a newly-discovered mold, *Streptomyces rimosus*, which was isolated from a soil sample. It belongs to the same family that produces streptomycin.

Drs. Ernest Q. King, Charles N. Lewis, Eugene A. Clark, Jr., John B. Johnson, John B. Lyons, Roland B. Scott and Paul B. Cornely and Henry Welch, Ph.D., of the Federal Food and Drug Administration and Freedmen's Hospital, administered terramycin to 30 patients having various types of infections.

Their results indicate that the drug is effective against pneumococcal and streptococcal pneumonias, urinary tract infections and whooping cough. Whooping stopped within 24 hours in one patient and within three days in another patient after treatment with terramycin was begun.

Terramycin was used in the treatment of venereal diseases at the Polk Health Center and the Rapid Treatment Center of Gallinger Municipal Hospital, District of Columbia Health Department, Drs. F. D. Hendricks,

A. B. Greaves, S. Olansky, S. R. Taggart, C. N. Lewis, G. S. Landman and G. R. MacDonald and Henry Welch, Ph.D., of the Federal Food and Drug Administration and the District of Columbia Health Department, report.

Eighty-one patients were treated, including 73 with gonorrhea, six with syphilis and two with granuloma inguinale (a venereal disease).

Terramycin effects a satisfactory cure rate in gonorrhea, although the dose required is somewhat higher than has been found necessary with chloromycetin, according to this group. Clinical healing of lesions of both syphilis and granuloma inguinale occurred promptly with daily doses of terramycin.

Laboratory work shows that terramycin appears comparable to aureomycin in its activity against certain bacteria and viruses, they say.

Both groups report that although the drug generally was well tolerated, nausea, vomiting, faintness and dizziness were experienced by some patients.

FIND CHLOROMYCETIN EFFECTIVE AGAINST TULAREMIA

Successful treatment of six cases of tularemia, also known as rabbit fever, with chloromycetin, one of the newer antibiotic drugs, is reported by a group of doctors from the University of Maryland School of Medicine, Baltimore.

The disease is acquired from wild rabbits and other wild animals and insects. It occurs as a local skin lesion and as a generalized infection with fever.

The doctors—Robert T. Parker, Robert E. Bauer, Howard E. Hall and Theodore E. Woodward—and Leonard M. Lister, a medical student, describe their findings in the May 6 *Journal of the American Medical Association*.

Both streptomycin and aureomycin previously have been shown to be valuable in treating tularemia.

ADVANCES IN NUTRITION PROMISE GREATER VIGOR AND LONGER LIFE

Newer advances in nutrition promise better control of disease, greater vigor and longer life, according to Dr. James R. Wilson, Chicago, secretary of the American Medical Association's Council on Foods and Nutrition.

Enrichment and fortification of cheap staple foods, such as bread, milk and oleomargarine, addition of iodine to table salt and discovery of the B complex vitamins were cited by Dr. Wilson as major achievements in nutrition which are making important contributions to health and vigor.

There is evidence that good nutrition has been important in producing the increase in height observed in the United States during the past 30 years, and that it may play an important role in delaying the degenerative changes of aging, he pointed out.

Practically all scientific knowledge of nutrition is relatively new, he said. The vitamin series dates from the work of Dr. Elmer V. McCollum at the University of Wisconsin in 1909. Dr. McCollum isolated and named vitamin A and vitamin B₁. Isolation of vitamin B₂ and its use to prevent degeneration of the nervous system in pernicious anemia is an achievement of the last few years.

On the frontiers of nutrition, the search for additional useful vitamins and minerals continues and research is being carried on in geriatrics (the science of aging) and plant genetics.

Effective application of scientific knowledge of nutrition largely depends on housewives, Dr. Wilson said. As "administrators of civilization" they are important in bringing advances in nutrition into practical use.

Dr. Wilson emphasizes these rules to follow daily for good nutrition at any age above infancy:

1. Eat an egg and at least one serving of another protein food.
2. Use whole grain or enriched bread and other whole grain or enriched cereal products.
3. Make sure the salt in the kitchen is iodized unless you live near the sea coast or eat sea foods liberally.

4. Drink pasteurized milk (a pint for adults, a quart for children and old persons—vitamin D enriched for all persons who get little sunlight).

5. Eat at least two servings of green leafy or yellow vegetables and at least one serving of citrus fruit or tomatoes and other fruits or vegetables containing vitamin C.

6. Use butter or enriched oleomargarine.

FIND CRITICISM INJURES CHILDREN WITH READING DISABILITY

Criticism by the teacher and parents makes a child who reads poorly lose confidence in his ability to do school work and leads to the development of various emotional problems, with psychologic blocks which further aggravate the condition.

This point is brought out in an editorial in the April 15 *Journal of the American Medical Association* which says that an estimated 12 per cent of all children in the United States fail to learn to read as well as the average of their school class.

"It is doubtful that there is in these children any underlying organic lesion," the editorial says. "Emotional factors such as fear, anxiety, rivalry, jealousy, hostility for the parent or the teacher and a feeling of inferiority undoubtedly play an important role in creating these difficulties."

Three recent articles in medical publications pointed out the belief that the new method of teaching reading, the so-called "flash" method, is an important contributory factor in the creation of these disabilities, according to the editorial.

"The flash method employs whole words on cards with pictorial representation to develop pure visual associations," the editorial says. "The method was expanded into a phrase and later into a sentence method. The child on entering school immediately learns to read whole sentences."

Another article in a medical publication points out that, while this method produces rapid and intelligent readers, it tests to the limit the child's power of attention and concentration, the editorial says, adding:

"These authors feel that certain minor difficulties (of vision) which were of minor importance under the older methods of teaching have now become significant."

According to one author, there were three times as many cases of reading difficulties among children who had been taught by the flash method as among those who had been taught by the older phonetic method, the editorial says.

REPORT PROGRESS IN TREATMENT OF LEPROSY

Clinical treatment and public health management of leprosy (Hansen's disease) can be viewed with more optimism than formerly was possible, says an editorial in the April 29 *Journal of the American Medical Association*.

The editorial follows in part:

During the last decade a much more hopeful outlook in respect to medical treatment has been effected. Chaulmoogra oil and its derivatives, which were the drugs that were chiefly used for years, have been discarded, their usefulness having been demonstrated to the satisfaction of most students of the disease. Much credit for the prospect for improved therapy is due to the work of the United States Public Health Service officers at the federal hospital at Carville.

This group used promin, which had been tried by others without much success in human tuberculosis. After months of discouraging trial, definite improvement was observed in many cases, a result never before shown by any other therapeutic agent, although leprologists generally agree that it is too early to speak of the new agent as definitely curative.

Some other members of the sulfone group gave

similarly encouraging results. Some of the latter, notably diasone, which recently was accepted by the Council on Pharmacy and Chemistry of the American Medical Association, may be given by mouth. Results with the sulfone drugs put the treatment of the disease in the hands of the practicing physician, although most physicians no doubt will prefer to have the treatment inaugurated at Carville.

The changes in the public health point of view are to some extent due to the development of a more hopeful outlook for successful treatment but are associated more with a somewhat belated recognition of certain not widely appreciated features in the epidemiology of the disease. There are limited areas in which the disease tends to spread in the United States, mainly in parts of Florida, Louisiana and Texas. Elsewhere the disease shows little or no tendency to be communicable.

Another influencing factor is the recognition that even in areas of prevalence, only persons discharging or likely to discharge the causative organism are sources of new infections. Furthermore, it is becoming increasingly accepted that with some exceptions infection is likely to occur only in the early years of life, although there may be clinical manifestations for many years because of the long incubation or latent period.

In these days, when so much emphasis is being placed on the organization of research and the necessity of large funds to carry it on, it is significant to recall that the advances in control of leprosy have been made by careful clinical observation and epidemiologic facts judiciously appraised without special organization or special financial support.

WARNS OF DANGER IN INDUSTRY FROM BERYLLIUM

Recent reports from doctors and other research workers emphasize danger of poisoning in industry from beryllium, Dr. C. M. Peterson, Chicago, secretary of the American Medical Association's Council on Industrial Medicine, said today.

Dr. Peterson cited articles in the April issue of *Archives of Industrial Hygiene and Occupational Medicine*, published by the A.M.A.

Exposure to beryllium, a metallic element, produces both a severe, acute lung disease which resembles pneumonia and a chronic form of lung disease with a fatality rate of from 10 to 35 per cent, Dr. Peterson said.

A report in this issue of the *Archives* by Dr. James K. Scott and Herbert E. Stokinger, Ph.D., Robert H. Hall, Ph.D., L. T. Steadman, Ph.D., Norman J. Ashenbarg, M.S., and George F. Sprague III, M.S., of Rochester, N. Y., concerning tests on animals reveals the high toxicity of beryllium.

"Not only is beryllium unquestionably a toxic agent but it is toxic in such small quantities as to be among the most toxic chemically of all elements yet investigated," this research group points out, adding:

"These amounts give rise to acute effects. It is reasonable to believe that still smaller quantities produce the chronic disease in human beings and that 'safe' levels of beryllium exposure ultimately may be set well below one microgram per cubic meter of air."

REVISED EDITION OF MOTION PICTURE REVIEWS NOW AVAILABLE

The Committee on Medical Motion Pictures of the American Medical Association has completed the second revised edition of the booklet entitled "Reviews of Medical Motion Pictures." This booklet now contains 225 reviews of medical and health films reviewed in *The Journal of the American Medical Association* to January 1, 1950. Each film has been indexed according to subject matter. The purpose of these reviews is to provide a brief description and an evaluation of the

motion pictures which are available to the medical profession. Each film is reviewed by competent authorities and every effort has been made to publish frank, unbiased comments. Copies are available at a cost of 25 cents each from: Order Department, American Medical Association, 535 North Dearborn Street, Chicago 10, Illinois.

HEALTHGRAMS

It is estimated that, including approximately 700,000 in resident institutions, there are 2,160,000 persons from 13 to 64 years of age who are incapacitated to such an extent that they must be considered to be out of the labor force permanently or at least for 10 years or longer. Theodore D. Woolsey, Pub. Health Rep., February 10, 1950.

A mycotic infection should be suspected in every patient who has chronic draining sinuses even though the clinical appearance of the lesions may be identical with those produced by the tubercle bacillus and by certain anaerobic streptococci. David T. Smith, M.D., J.A.M.A., December 24, 1949.

The early manifestation of pulmonary tuberculosis is usually a lesion of a predominantly exudative, pneumonic character. It may vary in extent from a small localized focus to massive pneumonic involvement in some extreme cases. Lesions of a massive pneumonic type were observed much more often in nonwhite than in white patients. The great majority of patients with early minimal pulmonary tuberculosis have no symptoms. At present, the only method available for detection of the truly incipient tuberculous lesion is routine chest X-ray examination at periodic intervals. David Reisner, M.D., Am. Rev. Tuberc., March, 1948.

If welfare departments are to have the personnel to give the service that they are fitted to render and if they are to have funds enough to give relief allowances adequate for the needs of the tuberculous, public support must be rallied around the social welfare aspects of the anti-tuberculosis campaign. The tuberculosis association can help to build up a foundation of public opinion in support of adequate relief under social welfare laws for the families of the tuberculous. R. D. Thompson, M.D., Nat. Tuberc. A. Bull., October, 1949.

The study of tuberculosis cannot be separated fruitfully from that of other pulmonary diseases. The teaching of the disease should be organized in conjunction with that in other pulmonary diseases from the standpoint of physical findings, clinical course, differential diagnosis, and management. Robert G. Bloch, M.D., Bull. Nat. Tuberc. A., January, 1950.

The skills required in the modern treatment of pulmonary tuberculosis are many and varied. The frequent association of tuberculous and nontuberculous complications adds further to the need for practically all medical and surgical specialty services, not excluding research facilities. The closest possible association and interchange of information and ideas between the tuberculosis and general hospitals is for these reasons evidently desirable. Particularly is it desirable for the teaching hospitals, which are the principal centers of clinical research, to maintain active contact with tuberculosis institutions, and even to provide a quota of beds for the interchange of patients. Carl Muschenheim, M.D., Am. Rev. Tuberc., July, 1949.

NEW BOOKS

BREAST DEFORMITIES AND THEIR REPAIR. By Jacques W. Maliniac, M.D. Clinical Professor of Plastic Reparatative Surgery and Associate Attending Plastic Reparatative Surgeon, New York Polyclinic Medical School and Hospital, New York City; Attending Plastic Surgeon, Sydenham Hospital; Diplomate, American Board of Plastic Surgery. Cloth. \$10. Pp. 193, with illustrations. Grune & Stratton, Inc., Medical Publishers, 331 Fourth Avenue, New York 16, N. Y.

"The purpose of the book is to show the surgeon, gynecologist, and obstetrician, interested in mammoplasty surgery but without special experience in the field, which are the safe procedures available for correction of breast deformities, and to help him determine the proper method for each individual case.

"The author's extensive experience enables him to evaluate present-day methods, though he acknowledges that such an appraisal is a 'touchy and unrewarding task.' In analyzing the procedures, he retains what is sound in each and rejects what is questionable and untested . . ."

A PRIMER FOR DIABETIC PATIENTS—An Outline of Treatment for Diabetes with Diet and Insulin including Directions and Charts for the Use of Physicians in Planning Diet Prescriptions: By Russell M. Wilder, M.D., Ph.D., F.A.C.P., Professor and Chief of the Department of Medicine of the Mayo Foundation, University of Minnesota; Senior Consultant in the Division of Medicine, Mayo Clinic, New, 9th Edition. 200 pages with 8 figures. Philadelphia and London: W. B. Saunders Company, 1950. Price \$2.25.

This primer for diabetic patients, written by a noted authority on the subject, will be found to be most useful both to the patient and his physician. Its cover and pocket-size are attractive, and the meat contained inside all make for education and improvement of the diabetic.

* * *

TEXTBOOK OF ENDOCRINOLOGY: Edited by Robert H. Williams, M.D., Executive Officer and Professor of Medicine, University of Washington Medical School, Seattle. With the collaboration of: Peter H. Forsham, Harry B. Friedgood, John Eager Howard, Edwin J. Kepler, William Locke, L. Harry Newburgh, Edward C. Reifenshtein, Jr., William W. Scott, George Van S. Smith, George W. Thorn, Lawson Wilkins. 793 pages with 168 figures. Philadelphia and London: W. B. Saunders Company, 1950. Price \$10.00.

Professor Robert H. Williams, editor of this volume, with the able assistance of 11 distinguished collaborators, has succeeded in making this new book one that should be of interest to every physician, and workers in other fields as well.

* * *

PROCTOLOGY IN GENERAL PRACTICE: By J. Peerman Nesselrod, B.S., M.S., M.Sc. (Med.), M.D., F.A.C.S., F.A.P.S., Associate in Surgery, Northwestern University Medical School; Associate of Surgical Division of Proctology, Evanston Hospital, Evanston, Ill.; Certified by the Central Certifying Committee in Proctology (Founders' Group) of the American Board of Surgery; Commander (MC) USNR. 276 pages with 64 figures. Philadelphia and London: W. B. Saunders Company, 1950. Price \$6.00.

Written and illustrated with the view of giving the general practitioner helpful aid with his proctologic patients, this small but excellent book should be part of every physician's library.

The Medical Association of Georgia will hold its 1951 annual session in Augusta. The dates are April 17, 18, 19 and 20. Bon Air Hotel will be headquarters, with Partridge Inn participating. Please make your reservations now.

THE JOURNAL OF THE MEDICAL ASSOCIATION OF GEORGIA

PUBLISHED MONTHLY under direction of the Council

Vol. XXXIX

Atlanta, Georgia, July, 1950

No. 7

BURNS: THEIR EFFECTS AND TREATMENT

BERRY BOWMAN, JR., M.D.

Albany

The classification of burns as first, second and third degree needs no explanation. This discussion applies primarily to those of second and third degree burns. The pathology of burns both from the organic and physiologic standpoint must be understood in order to arrive at an intelligent plan of treatment. Therefore, the disturbed physiologic chemistry of the burned patient shall be discussed after which a plan of treatment will be proposed. This shall be offered as a combination of personal experience and a limited review of the literature dealing with the subject.

Pathologic effect of burns: For many years it has been recognized that there are systemic changes due to burns that overshadow the local lesions. Much debate has occurred in the past as to whether these ill effects are due to some histamine-like toxin produced by the burned tissue or are the results of changes in blood chemistry and blood concentration. Unquestionably both of these factors and, perhaps, others contribute to the morbid condition of the patient and, together with a number of other deviations from the normal physiologic chemistry of the person burned, their effects have been clearly and unequivocally demonstrated.

There is a marked disturbance of body chemistry characterized by a loss of electro-

lytes, most prominent of which are chlorides and sodium. In many instances the chloride loss only becomes demonstrable on or about the sixth post-burn day, at which time a fall from the normal 600 milligrams per cent to around 300 or 400 milligrams may be noted. Sodium loss occurs concomitantly and, as to which deficit is of most importance, is a moot question. It has been shown by the injection of radio-sodium in experimental animals¹ that there occurs a massive shift of sodium into the injured tissues with a concomitant but relatively less transfer of fluid. The sodium ion thus becomes lost as available circulating sodium into the extracellular edema fluid. Thus a condition is established leading directly to a decrease in the carbon-dioxide combining power with a resultant acidosis.

Extracellular fluid volume has been measured by Cope and Moore¹⁵ by the thiocyanate and radio-sodium methods and expressed in per cent of body weight. Their findings indicated an extracellular fluid volume of 18 to 25 per cent body weight. These workers, using the Evans dye method, also calculated the plasma volume of the human patient at 3.5 to 4.5 per cent body weight. They found that by measuring the amount of sodium in the burn exudate the external water loss could be calculated since its concentration should be the same as that of the plasma.

Cope and Moore also found that the maximal edema in the burned human is reached between the 36th and the 48th hour and in burns of partial thickness its subsidence may be as rapid as its formation. This

knowledge is of importance in preventing overzealous fluid therapy which might result in overloading the circulation.

A "relentless expansion"¹⁵ of the interstitial fluid volume occurs in the first 48 hours after severe burn which depletes the protein and water resources of the plasma leading to severe dehydration if not treated promptly and efficiently. It is here that inadequate replacement of electrolytes and protein results in renal failure and parenchymatous changes in other organs. Cope¹⁵ states that fundamentally this interstitial fluid volume is the edematous distention in the wound area and is proportional to the area burned. However, the latter relationship is not direct since a burn¹ of 30 per cent of the body area may be found to be accompanied by an expansion of interstitial space of 50 per cent above normal. Expansion to this degree and above carries a gloomy prognosis as to survival. External fluid loss is of minor degree as compared to the pooling of edema fluid in the wound area.

As a result of hemoconcentration, acidosis and sluggish pulmonary circulation, oxygenation of the blood becomes increasingly inefficient, producing tissue anoxia and hyperventilation with a further loss of fluids by the patient. Thus a vicious cycle of reduction of the plasma volume and increased hemoconcentration is established which, if not successfully combatted, leads to a fatal end.

Post-burn anasarca is an evidence of disturbed albumin-globulin ratio secondary to the loss of albumin due to increased capillary permeability. An index to protein loss, in addition to reversed albumin-globulin ratio is the early fall in total nonprotein nitrogen. Later there may be a rise in total nonprotein nitrogen, creatinine and urea secondary to renal tubular damage. Kayser,¹⁶ in his metabolic studies of burn cases,

confirmed the well known tendency of these patients to go into negative nitrogen balance but concluded that in his own cases he believed this due to low intake rather than increased loss of nitrogen. He found exudate nitrogen made up 2 to 25 per cent of the total nitrogen output (excluding feces).

Hyperglycemia occurs in some burn cases though not all. In one personal case a three plus urinary sugar was noted in the first 24 hours following injury, but a blood sugar determination was not done. When present, hyperglycemia is thought due to adrenal stimulation. It may also be due to liver glycogenolysis and may possibly be a contributing factor in the post-burn acidosis of severe cases. The actual significance of elevated blood sugar in burn cases, however, is of doubtful importance in that we see this sometimes occurs after severe trauma from sources other than heat.

The determination of blood concentration by the hematocrit evaluation is important although it should be considered together with blood counts and hemoglobin determinations. The hematocrit determination has been used by some in calculating plasma replacement. This will be given later.

Complications and morbid changes: Cooper, in 1839, first described ulceration in the duodenum in burned cases. This was more clearly done in 1842 by Curling, whose name has since been applied to this peculiar phenomenon. So-called "Curling's ulcer" has been found to be present in 3.8 per cent of all cases coming to autopsy from fatal burning. Hartman⁶ produced the lesion in 12 per cent of his experimental animals and curiously enough showed that of these 63.6 per cent occurred in animals treated by bland dressings in contrast to 6.6 per cent treated with tanning agents. No explanation was offered. Various hypotheses as to

the cause of Curling's ulcer include:

1. Hyperacidity of the gastric secretion with increased gastric motility (Mecheles & Olson).
2. Actions by burn toxins, "protein metabolites", formed by digestion of burned areas producing focal necrosis and hemorrhage of the duodenal mucosa which is then transformed into an ulcer by the pancreatic juices (Harris).
3. Blood concentration leading to stasis, ruptured capillaries and mucosal anoxemia, followed by necrosis and ulceration (Kapsinow).
4. Low blood volume leading to necrosis, congestion, hemorrhage and ulceration (Blalock).
5. Petechiae secondary to sepsis (Perry & Shaw).

At any rate, edema and congestion of the duodenal mucosa has been noted within three days after burns. Hartman⁶ believes that otherwise normal gastric acidity in the presence of an edematous mucosa is probably sufficient to produce ulcer, particularly if a concomitant decrease in duodenal alkalinity is present.

Liver: Parenchymatous degeneration has been frequently noted in the liver at autopsy of fatally burned persons. Furthermore, numerous and varied liver function tests have shown impairment of liver function in these injuries. That this may be facilitated by the loss of liver glycogen, as mentioned earlier in this paper, is speculative. McClure, Lam et al⁹ have clearly demonstrated that tannic acid produces severe, if not fatal, lesions in the liver. Liver damage is often evidenced in burned patients by nausea, vomiting and hematemesis. The lesion is one of congestion and necrosis.

Kidneys: Interstitial pyelonephritis and nephrosis have been found at autopsy of fatally burned patients. This could account for the gradual increase in creatinine, urea and total nonprotein nitrogen in cases responding poorly to therapy. The presence of albuminuria discloses the permeability of the renal glomerulus to this large protein molecule.

Bowel: Many burned patients have a mild or moderate melena, usually appearing around the sixth post-burn day. This can be extreme and severe and is due to hemorrhagic petechiae and ulceration within the gastro-intestinal tract.

Skin: Toxic erythema, though due to petechial hemorrhage in the skin, has been noted.

Ficarro³ reports a fatal burn in which, in addition to the above-listed phenomena, the autopsy disclosed bilateral adrenal hemorrhage, hemorrhagic cystitis, acute tracheitis, ulcerative esophagitis and pulmonary edema. Edema of the trachea and esophagus are not difficult to fathom, particularly in those patients who have been burned about the face and who have, in all likelihood, breathed in the flame.

Treatment: With the above-cited morbid anatomy and physio-chemical changes in mind, the treatment of burns immediately and obviously falls into two distinct categories: (a) restoration of the normal blood chemistry and (b) treatment of the local lesion.

Of value in the prognosis and treatment is a standard of estimation of the body surface area burned. Numerous workers have attempted to set forth a table or standard whereby this can be done—all have their points of value but probably the simplest and most accurate is that of Lund and Browder,⁴ reproduced herewith:

Age-years	Head Per cent	Trunk Per cent	Up, Ext. Per cent	Low, Ext. Per cent
0	19	34	19	28
1	17	34	19	30
5	13	34	19	34
10	11	34	19	36
Adult	7	34	19	40

Breaking this still further: neck: 2 per cent; genitalia: 1 per cent; buttocks: 5 per cent; anterior trunk: 13 per cent; posterior trunk: 13 per cent; thighs: 19 per cent; legs: 14 per cent and feet: 7 per cent.

In the determination of the amount of plasma indicated in the individual burn case several methods have been advanced. Most often quoted of these are two as follows: (1) 50 to 100 cc. of plasma for each 1 per cent of surface area burned and (2) 100 cc. of plasma for each point the hematocrit exceeds 45. The latter is that of Harkness and would appear more reliable.

It has been shown that plasma, by virtue of its protein element, is superior to the ad-

ministration of either normal saline or glucose-saline alone. Administration of the latter would seem to further increase the loss of electrolytes and albumin by "washing out" due to its deficiency in oncotic properties as compared to plasma. Even better, of course, would be the administration of whole blood. Transfusion of whole blood increases the oxygen-carrying elements that the patient badly needs. By giving whole blood (up to 5 per cent of the body weight) during the shock phase Abbott et al² state that the anemia encountered in the convalescent period of burned animals and patients can be ameliorated or prevented. When salt solution is given by mouth in conjunction with whole blood intravenously, during the shock phase, hemoconcentration is not encountered according to these investigators. It has been definitely established that the transfusion of whole blood in the presence of hemoconcentration is *not* contraindicated due to the fact that the donor blood is dilute in comparison to that of the patient.

Where evidence of reduced adrenal function is present, the use of one of the adrenal cortex preparations is indicated. Such evidence may take the form of a feeling of weakness with profuse sweating.

Cope and Moore¹⁵ have brought forth a surface area formula for fluid therapy that is more appealing to me than those given above. This formula is based upon the concept that wound demand is proportionate to extent, that rate of edema formation decreases with time after injury and that requirements of normal metabolism, including kidney function, must be met in addition to those of the wound itself. Therefore, they offer the following formula which, of course, cannot be offered dogmatically for all burns but from which satisfying adjustments may be made to suit the individual problem. Their formula for fluid replace-

ment is:

1. For wound edema give 10 per cent of the body weight.

2. For external loss of an amount varying according to the area of wound surface:

Burns of 25 to 35 per cent—1000 cc.

Burns of 35 to 60 per cent—2000 cc.

Burns of 60 per cent and over—3000 cc.

1 and 2 are added and 2/3 of the total is given as plasma and the remaining third as isotonic electrolytes. This total is subdivided into four portions, two of which are given within the first 12 hours post-burn, the third part in the second 12 hours and the fourth part in the second 24 hour period. This prevents an overwhelming release of fluid when the extracellular fluid begins to recede after the 36 to 48 hour high. In addition to the above, 1500 cc. of isotonic electrolyte (to a total of 3000 cc.) is given for renal excretion for each 24 hour period, one-half of this being given intravenously and one-half orally as glucose in water or, if necessary, also intravenously. For insensible fluid loss 1500 cc. (3000 cc. total) of glucose in water intravenously or palatable low salt solution orally is advocated.

Cope and Moore believe the hourly check of renal output by indwelling catheter is the safest method of guarding against renal shutdown. This together with hourly determinations of urinary specific gravity. These should be recorded on the chart. They state that where the hourly renal output is 50 to 200 cc. therapy is adequate and no increase should be permitted; 30 down to 5 cc. per hour calls for immediate increase in fluid replacement; over 200 cc. per hour if encountered in the first 48 hours indicates over-treatment—after the first 48 hours it is probably due to spontaneous diuresis. A continued low output (0 to 30 cc. per hour) in the presence of continued therapy suggests inadequate replacement or a renal lesion. In the latter instance continued increase in therapy threatens to produce edema or cardiac failure. The rapid fluid injection test (1000 to 1500 cc. of 5 per cent glucose in distilled water within 45 to 60 minutes) should be done. If immediate increase in renal output occurs then the fluid replacement therapy has been inadequate and should be increased at once; however, should no increase in renal output occur it can be assumed that kidney damage is present and an increase in fluid replacement will be dangerous.

Olson and Necheles¹⁷ in their studies of anuria in thermal burns found it similar to

the anuria of transfusion reaction, crush-syndrome and hemolytic disease and that death obviously will ensue unless the anuria is overcome. They felt that the common factor of these anurias is intravascular hemolysis due to sudden and rapid destruction of red blood and muscle cells liberating large amounts of hemoglobin and myoglobin and fragments of cells into the circulation. Added to this, of course, is renal tubular damage by anoxia and toxins. They found that the intravenous administration of 2½ per cent sodium sulfate solution was the only fluid that worked reliably and beneficially in burn anuria. The sulfate ion is comparatively inactive physiologically and is excreted rapidly, thus producing a diuretic effect. Needless to say mercurial diuretics should not be considered in burn cases.

Local treatment of the burned area: In 1924, Davidson, working in the Henry Ford Hospital in Detroit, brought forth the use of tannic acid (which had been used centuries before by the Chinese in the form of strongly brewed tea). This treatment gained wide popularity and, until recently, has been almost universally employed. However, among its earliest recognized shortcomings was the fact that, due to its almost complete lack of bactericidal properties, infection frequently occurred under the eschar, necessitating removal of the latter. Recently McClure and Lam,⁹ working in the same institution as Davidson, have shown that tannic acid produces severe, if not fatal, lesions in the liver and definitely inhibits healing of the wound. Liver damage, due to tannic acid, was further shown by Saltonstall et al⁷ who found by liver function tests that tannic acid used in burn therapy is absorbed sufficiently to produce liver damage. They concluded that tannic acid is the most hepatotoxic agent, although all tanning agents are toxic to a lesser extent. McClure states that

tannic acid is particularly obnoxious in the treatment of second degree burns due to the great absorptive property of these burns. It produces less damage in third degree burns as these possess less absorptive potentiality. McClure states that "it is hoped that this communication from a group working in the same institution (as Davidson) will result in the abandonment of the treatment of burns by this (tannic acid) and related methods". The fact was shown that the mortality rate from burns actually increased during the tannic acid era, although this is contested by some. Rae and Wilkerson¹⁹ felt there was less likelihood of liver damage where tannic acid followed by silver nitrate was used than tannic acid alone.

In a comparison of 82 experiments conducted by burning symmetrical areas on the thighs of 41 volunteers, Dingwall and Andrus⁸ found that the best results measured in time of healing, absence of symptoms and freedom from complications were obtained by the use of sulfonamide impregnated film. Next best was local treatment with a bland ointment together with sulfonamide by mouth.

Some have objected to the use of sulfonamides locally on the basis of creating a sulfonamide sensitivity in the patient. However, in the 41 cases cited sensitivity occurred in only six with mild reactions and no sensitivity could be demonstrated in any of them five weeks after cessation of treatment. Jenkins states that in the use of sulfonamide ointments there is sufficient liberation of sulfathiazole from its ointment to produce a bacteriostatic effect which may continue for a week or more. He further states that the liberation of sulfathiazole from the ointment is sufficiently gradual to prevent overwhelming systemic absorption and advocates its use especially in situations where adequate cleansing cannot be obtained. Evans¹⁰ demonstrated clearly that the

absorption of a sulfonamide is limited when used in an oil base ointment and that where water dispersive bases are used a toxic blood level can occur.

Sulzberger and Karnoff¹⁸ investigated the debriding effect of 0.1 M pyruvic acid in a starch paste on burn wounds. They found this to offer a simple and practical topical treatment for third degree burns which would produce a pink granulating base suitable for grafting within three to five days after beginning treatment. Viable areas were not adversely affected by the acid and were thus preserved as islands for re-epithelization. The treatment, when used, should be started within two or three days of initial injury or as soon as the peripheral vascular failure has been controlled. The pyruvic acid-starch dressing affords frequent inspection of the wound without pain to the patient and supposedly without interference with healing. The preparation is applied in copious amounts (3000 cc. for a leg—8000 to 9000 cc. for leg and thigh), covered with a layer of dry gauze, then a layer of vaseline gauze and finally multiple layers of gauze and semi-pressure bandage.

Recently various protein extracts and preparations have been tried in the local treatment of burns in the hope of forming a more physiologic eschar than could be produced by chemicals. Chase¹⁹ obtained an extract from beef aorta which, while a protein, contained no albumin, proteoses nor peptone. This could be used in saline or in an ointment to which sulfathiazole or penicillin could be added. He has employed it with satisfactory results in over 500 ambulatory cases and feels that its advantages are that it can be removed with water or saline with ease, it forms a flexible, dry eschar over denuded surfaces, there is no evidence of tissue injury or retarding of growth, that infected areas are easily identified as the protecting eschar liquifies and disintegrates

over areas of infection and, finally, that because of the protective eschar the wound can be inspected frequently without fear of contamination.

It has become increasingly evident of recent years that wounds can be dressed too often. Particularly is this true of burns. A direct relationship can be said to exist between the time of healing and the number of times the dressings are removed; i.e., the fewer the dressing changes, the quicker the healing. This is clearly understandable when one reflects that at each dressing one simply removes much newly-formed, delicate epithelium that is attempting to cover the burned area. That the fewer the dressings, the better the healing is true has been the experience of the writer who refuses to change the initial dressing unless clinical evidence of infection beneath them appears. So far this has not occurred and the satisfaction of removing a dressing after 14 to 16 days and finding the burned area completely covered with new skin is a delightful experience. Patients must frequently be reassured to prevent them believing themselves neglected, as the average one feels that any dressing or bandage must be frequently changed!

In the two station hospitals in which I worked during World War II, the treatment of burns consisted of analgesia with morphine and atropine, followed by the meticulous scrubbing of the burn area with white soap and sterile saline under aseptic technic. Following the scrubbing a complete change of sterile drapes, gown and gloves was accomplished and the burn was covered with a single layer of sterile, plain vaseline gauze in accurate apposition to the burn surface and covered by multiple layers of sterile gauze dressings which, in turn, were held in place by roller bandage followed with ACE bandages. The bandage was applied gently but with firm pressure.

Where fingers or toes were involved they were dressed separately and bandaged in full extension. A cast was applied if deemed necessary. Postoperatively a close check was maintained on the blood chemistry, intake and output. Daily hematocrit, blood counts, plasma, protein and urinalyses were obtained. A urinary output of 1500 cc/24 hours was striven for. After insuring adequate intake and output of fluids, sulfadiazine or sulfathiazole was given orally and blood concentration tests for sulfa requested every other day with daily urinalyses. Multiple layers of sterile gauze were preferred by me to sterile mechanics' waste due to the greater smoothness of the resulting bandage.

In cases where anesthesia was necessary pentothal sodium by vein was the agent of choice. Particularly would this seem true in patients burned about the face or with laryngeal injury. Furthermore, pentothal sodium is less prone to produce circulatory complications and less likely to contribute to postoperative blood and hemoglobin concentration. The complication most feared was severe laryngeal spasm, which has never befallen me, and which should be avoided by the use of atropine instead of scopolamine and by use of an airway. Papper¹² regards morphine as the analgesia by choice in the anesthetic management of the severely burned patient and uses pentothal only where morphine is inadequate and supplements the pentothal with 50 per cent nitrous oxide in oxygen.

Not to be overlooked is the nutritional care of the burned patient: the protein and vitamin losses must be restored as well as the electrolytes and must be kept at a normal level. This should be accomplished by feeding the patient high-protein high-vitamin diets by mouth if possible and gavage if necessary. One of the principal demands of the burn victim is for nitrogen due to the excessive loss of this element in the urine

in the early convalescent period. Marked abnormalities of the carbohydrate metabolism occur in severely burned animals and humans and are associated with hyperglycemia, lacticacidemia and lowered carbon-dioxide combining power. In all probabilities protein catabolism is increased by absorption of specific substances from the burned areas.

Failure to meet the nutritional demands results in progressive weight loss and hypoproteinemia. The latter, when progressive, is a bad sign and should be considered as present when the plasma protein falls to any value below 5.

Supplying food by mouth is the most convenient and ideal procedure. Food must contain adequate protein, carbohydrates, fats, minerals and vitamins. High-caloric high-vitamin diets with upwards of 400 grams of protein daily may be necessary in some cases. Where gavage is necessary mixtures of egg white, skim milk, orange juice, brewers' yeast, lactose and freshly ground liver are recommended. Elman²⁰ advocates a high protein milk diet in which 100 grams of protein and 1000 calories are considered a daily minimum. He urges his patients to take twice this amount.

Summary: In summarizing it may be said that the burned patient suffers from general and local injury. The changes in blood chemistry are of extreme importance and must be combatted quickly. In brief, they include:

Loss of chlorides and sodium ions, blood concentration, acidosis with lowered carbon-dioxide combining power, sluggish pulmonary circulation with resultant tissue anoxia and hyperventilation, loss of fluids, protein and plasma volume, hyperglycemia, loss of nitrogen followed in fatal cases by nitrogen retention.

Organic pathologic changes include liver degeneration, kidney damage, ulcerations

of the gastro-intestinal tract, toxic erythemas, hemorrhagic cystitis, tracheitis and adrenal injury.

Treatment consists of restoration of the abnormal blood chemistry by the indicated use of plasma, whole blood transfusions, electrolytes, high-caloric, high-vitamin diets with adequate protein, carbohydrates and fats. Adequate fluid intake must be attained.

Proper observation as to response of the patient to treatment must include daily urinalyses, hematocrit determinations, plasma protein concentration, blood chlorides and blood counts.

It is to be understood that variations of all the above are to be expected and treatment varied to meet all cases which will naturally range from small second degree burns to extensive, severe ones or third degree types with all intervening degrees of severity.

The local treatment advocated by the writer is that of meticulous cleansing of the burned area under aseptic precautions followed by a single layer of plain vaseline gauze held in place by a voluminous pressure bandage. Sulfadiazine by mouth should be an integral part of the treatment.

BIBLIOGRAPHY

1. Fox, C. L., and Keston, A. S.: The Mechanism of Shock from Burns and Trauma Traced with Radio-Sodium, Surg., Gynec. & Obst. 80: 561 (June) 1945.
2. Abbott, W. E., et al: Metabolic Alterations Following Thermal Burns, Surgery 17: 794 (June) 1945.
3. Ficarra, B. J., and Naclerio, E. A.: The Physiochemical Disturbances in a Severe Burn, Surgery 16: 529 (Oct.) 1944.
4. Lund, C. C., and Browder, N. C.: The Estimation of Areas of Burns, Surg., Gynec. & Obst. 79: 352 (Oct.) 1944.
5. Roback, R. A., and Ivey, A. C.: Therapy of Burns, Surg., Gynec. & Obst. 79: 469 (Nov.) 1944.
6. Hartman, F. W.: Curling's Ulcer in Experimental Burns, Ann. Surg. 121: 54 (Jan.) 1945.
7. Saltonstall, et al: The Influence of Local Treatment of Burns on Liver Function, Ann. Surg. 121: 291 (March) 1945.
8. Dingwall, J. A., and Andrus, W. D.: A Comparison of Various Types of Treatment in a Controlled Series of Experimental Burns in Human Volunteers, Ann. Surg. 120: 377 (Sept.) 1944.
9. McClure, R. D., and Lam, C.: Tannic Acid and the Treatment of Burns: An Obsequy, Ann. Surg. 120: 387 (Sept.) 1944.
10. Evans, E. I., et al: The Absorption of Sulfonamides from Burned Surfaces, Surg., Gynec. & Obst. 80: 297 (March) 1945.
11. Jenkins, H. P., et al: Further Studies on the Preparation and Use of Sulfathiazole Ointment in the Treatment of Burns.
12. Papper, E. M.: Anaesthesia for Burned Patients, Surgery. 17: 116 (Jan.) 1945.
13. Levenson, S. N., et al: The Nutrition of Patients With Thermal Burns, Surg., Gynec. & Obst. 80: 449 (May) 1945.
14. Walker, J., Jr., and Shenkin, H.: Studies on the Toxemia Syndrome After Burns II: Central Nervous System Changes as a Cause of Death, Ann. Surg. 121: 301 (March) 1945.

15. Cope, Oliver, and Moore, F. D.: The Redistribution of Body Water and the Fluid Therapy of the Burned Patient, Ann. Surg. 126: 1010 (Dec.) 1947.

16. Kayser, J. W.: Metabolic Studies of Burned Cases, Ann. Surg. 127: 605 (April) 1948.

17. Olson, W. H., and Necheles, H.: Studies on Anuria—Effect of Infusion Fluids and Diuretics on the Anuria Resulting from Severe Burns, Surg., Gynec. & Obst. 84: 283, (March) 1947.

18. Sulzberger, M., and Kanof, A.: Studies on the Acid Debridement of Burns, Ann. Surg. 125: 418 (April) 1947.

19. Chase, C. H.: A New Eschar Technique for Local Treatment of Burns, Surg., Gynec. & Obst. 85: 308 (Sept.) 1947.

20. Elman, R., et al: Severe Burns: Clinical Findings with a Simplified Plan of Early Treatment, Surg., Gynec. & Obst. 83: 187 (Aug.) 1946.

21. Cope, Oliver: Anemia in Burns (Ed.) Surg., Gynec. & Obst. vol. 84 (May) 1947.

USE OF THE ORAL MERCURIAL DIURETICS IN ADVANCED CONGESTIVE HEART FAILURE

J. GORDON BARROW, M.D.

and

CLAYTON R. SIKES, M.D.

Atlanta

Oral mercurial diuretics have been reported of value as an adjunct to intramuscular mercurial diuretics in the treatment of the edema of congestive heart failure.^{1 5} We wished to determine their value in patients not able to come to the hospital for treatment as often as desirable. This group had required frequent visits by a physician or nurse for the administration of intramuscular mercurial diuretics.

Material and Methods

Patients chosen for this study required at least one intramuscular mercurial injection each week for the maintenance of "dry" weight. Many of them required two and even three intramuscular injections weekly, and in some even these frequent injections failed to maintain "dry" weight. Their ages ranged from 35 to 65 years. All of them had hypertensive or arteriosclerotic heart disease. The intramuscular mercurial diuretic used was Mercuhydrin* and the oral preparation was a Mercuhydrin and Ascorbic Acid* tablet containing 19.5 milli-

From the Cardiac Clinic of Grady Memorial Hospital and the Department of Medicine, Emory University School of Medicine, Atlanta.

* Product of Lakeside Laboratories.

grams of mercury and 100 milligrams of ascorbic acid in each tablet.

A total of 16 patients was treated. The longest period of treatment was 21 weeks. All patients were on a cardiac regimen including a low salt diet, full digitalization, weight reduction if necessary, and limited physical activity. The patients were observed during a control period consisting of at least three visits at intervals not longer than one week. Weight, symptoms, and signs of congestive failure were recorded, and the dose of intramuscular mercurial diuretic being received was recorded during this control period. At the end of this time intramuscular injections were discontinued and the patient was instructed to take two Mercurhydrin-and-Ascorbic Acid tablets daily. If the patient was unable to tolerate two tablets daily, the medication was temporarily discontinued and then begun again in a dosage of one tablet daily. Supplementary mercurial injections were given as necessary, depending upon the weight and symptoms of congestive failure.

Results

A brief summary of the course of treatment in each of the 16 patients is shown in Table 1. The results are concisely shown in Table 2. It should be noted that the incidence of unpleasant gastrointestinal symptoms was high, and in 5 of the 16 patients the oral medication had to be discontinued because of nausea, vomiting, diarrhea, or abdominal cramps. One patient with poor oral hygiene developed a severe stomatitis after eight weeks of treatment. The most severe reaction occurred in a patient who had experienced nausea since the second week of treatment, and whose dose had been reduced to one tablet daily. In spite of this, a severe bloody diarrhea developed and she became extremely weak. These symptoms disappeared immediately when the oral mercurial was discontinued. Of the

11 remaining patients who tolerated the drug, 5 required no intramuscular injections while on oral Mercurhydrin and Ascorbic Acid tablets for periods ranging from 4 to 21 weeks. Of the remaining 6 patients, all but one noted either a definite improvement in edema while on oral mercurhydrin in addition to supplemental intramuscular injections, or a definitely decreased need for intramuscular mercurhydrin. One failed to show any improvement during three weeks on both intramuscular injections and oral tablets.

Discussion

The high incidence of gastrointestinal toxic symptoms accompanying the administration of oral mercurials in this group of advanced cardiac patients proved a serious drawback. It is probably true that patients in severe congestive failure are more prone to develop gastrointestinal symptoms than patients in somewhat milder congestive failure. Among the patients who tolerated the drug the results were good in all except one, either definitely reducing or completely abolishing the need for intramuscular injections. In our experience the most satisfactory dose was one tablet, given twice daily, although an occasional patient exhibited a satisfactory response to one tablet per day.

The patient should be seen frequently during the first four weeks of trial on an oral mercurial diuretic in order that toxicity may be discovered early, and the degree of effectiveness may be quickly determined. Severe nausea, vomiting, diarrhea, and stomatitis are indications for discontinuing oral administration. If toxic symptoms do not develop during the first six weeks, it is unlikely that they will appear during the succeeding weeks.

Conclusions

Oral mercurial diuretics, in a dosage of 1-2 tablets daily, can be valuable adjuncts

TABLE 1

Oral Mercurial Diuretics in Advanced Congestive Heart Failure

Patient	Parenteral Diuretic (Control Period)	Oral Mercurial Diuretic	Toxic Signs and Symptoms	Weeks on Treatment	Parenteral Diuretic (Treatment Period)	Weight
L. W.	1 cc. weekly	2 tabs. daily	Abdominal cramps.	3	None	Stable
		1 tab. daily	Nausea and stomatitis.	8		
M. B.	1 cc. weekly	2 tabs. daily	None	19	None	Stable
J. L.	2 cc. weekly (edema poorly controlled)	2 tabs. daily	Nausea and diarrhea.	1	2 cc. x 2	Edema better controlled
		1 tab. daily	Nausea, vomiting & diarrhea	1		
M. R.	2 cc. weekly	1 tab. daily	None	7	2 cc. x 4	Stable
E. P.	2 cc. weekly	1 tab. daily	None	8	2 cc. x 2	Edema better controlled
M. D.	2 cc. alternate weeks	1 tab. alternating with 2 tabs. daily	None	6	0	Stable
B. M.	2 cc. weekly	2 tabs. daily	Nausea and vomiting.	1	0	Stable
		1 tab. daily	Diarrhea & cramps.	3		
I. W.	2 cc. weekly	4 tabs. daily	Nausea	1	0	Slight increase in edema
		2 tabs. daily	None	8		
E. B.	2 cc. weekly	2 tabs. daily	Slight nausea.	6	2 cc. x 3	Stable
R. H.	2 cc. twice weekly (edema not controlled)	2 tabs. daily	Nausea vomiting & diarrhea	2	2 cc. x 4	Edema not controlled
J. S.	2 cc. weekly	2 tabs. daily	None	4	0	Stable
F. J.	2 cc. weekly	2 tabs. daily	Slight nausea	5	0	Stable
A. Y.	2 cc. weekly (edema poorly controlled)	2 tabs. daily	None	3	2 cc. x 3	Stable
S. H.	2 cc. weekly (edema poorly controlled)	2 tabs. daily	None	8	2 cc. x 3	Edema better controlled
I. O.	2 cc. weekly (edema poorly controlled)	2 tabs. daily	Diarrhea	2	2 cc. x 1	Increase in edema
		1 tab. daily	Nausea, vomiting & bloody diarrhea	4		
R. K.	2 cc. twice weekly	2 tabs. daily	None	21	2 cc. x 7	Stable

to the use of parenteral mercurial diuretics in the treatment of chronic, severe, congestive heart failure. The physician must be aware of the frequency of gastrointestinal toxic symptoms following use of the drug. The incidence of toxic reactions seen in this clinic has been significantly higher than that reported in other series. The tablets have been of particular benefit in patients who could not be given intramuscular mercurial injections as frequently as needed.

TABLE 2

Results of Treatments with Oral Mercurial Diuretics in Advanced Congestive Heart Failure

Results No. Patients

1. Weight satisfactorily controlled without toxic symptoms.....	11
(a) No supplemental parenteral mercurial diuretics necessary	5
(b) Supplemental parenteral mercurial diuretics necessary	6
2. Toxic symptoms necessitated omission of the oral drug..	5
(a) Weight satisfactorily controlled while on the drug ..	3
(b) Slight to moderate increase in edema in addition to toxic symptoms.....	2

BIBLIOGRAPHY

1. Vander Veer, Joseph B.; Clark, Thomas W., and Marshall, Davis S.: The Prolonged Use of an Oral Mercurial Diuretic in Ambulatory Patients with Congestive Heart Failure, *Circulation* 1:516, 1950.
2. Derow, Harry, A., and Wolff, Louis: The Oral Administration of Mercupurin Tablets in Ambulatory Patients with Chronic Congestive Heart Failure, *Am. J. Med.* 3:693, 1947.
3. Batterman, Robert C.; DeGraff, Arthur C., and Shorr, Harold M.: Further Observations on the Use of Mercupurin Administered Orally, *Am. Heart J.* 31:431, 1946.
4. Solomon, H. A., and Abraham, A.: Success with Oral Mercurial Diuretic, *New York State J. Med.* 48:1593, 1948.
5. Shaffer, C. F., and Chapman, D. W.: The Use of Oral Mercuhydrin Combined with Ascorbic Acid in Cardiac Decompensation, *J. Lab. & Clin. Med.* 34:1750, 1949.

THE INJECTION TREATMENT OF HEMORRHOIDS

FRED B. HODGES, JR., M.D.

Atlanta

The injection treatment of hemorrhoids has been practiced for over 80 years. It has been only within the past two or three decades, however, that this method of therapy has assumed its rightful place among scientifically recognized procedures. During earlier years many men, untrained in its use, caused so much adverse criticism that

it was abandoned by all but a few. Kelsey, Andrews and others recognized the value of injections in selected cases, and it is through the efforts of such men that this form of treatment has reached its present day status.

Only patients with internal bleeding hemorrhoids and those who have a mild degree protrusion should be treated by this method. Those with external hemorrhoids, strictures, fissures, ulcerations, fistulas, or any inflammatory process, should not be treated by injections. However, there are many occasions when injections may be used to an advantage as a palliative measure, such as to control hemorrhage while preparing a patient for surgery, or in cases of advanced pregnancy, old age, diabetes, tuberculosis and cardiorenal diseases where operative procedures may be definitely contraindicated.

Among the advantages of the injection treatment are: freedom from pain, no confinement to bed, no hospitalization, little or no loss of time from work, and relief is usually prompt. It should be explained to the patient that, as soon as relief is experienced, they are not necessarily cured and should continue treatments until the hemorrhoids have disappeared.

The purpose of the injections is to produce irritation with a chemical solution sufficient fibrosis to obliterate the network of dilated veins forming the hemorrhoid, causing it to shrink but not sufficient to cause sloughing of the tissues.¹ To accomplish this, the most frequently used and most universally accepted solutions are:

Rx	5% to 10% Phenol in Olive Oil or Almond Oil.
Rx	Phenol .....—fl. dr. i
	Glycerine .....—fl. dr. iii
	Distilled water .....—fl. dr. iv
Rx	Quinine and urea-hydrochloride.....—gr. xxiiss
	Distilled water .....—fl. oz. i

More recently Terrell² of Richmond, Va.,

has advocated quinuride, which is a 4½ per cent solution of anhydrous quinine and urea, adjusted to a pH of 2.6 with hydrochloric acid. Good results may be obtained by using any one of the above mentioned solutions. In my experience phenol in oil has been very effective and the technic will be described below.

No expensive equipment is required, the essentials being a suitable speculum, preferably the blunt end type; the sclerosing fluid; suitable syringes; needles; a good light; a mild antiseptic; lubricating jelly; some sponges; forceps and cotton. Most of these are always found in the average doctor's treatment room.

Before giving an injection it is always well to remember the types suitable for injection and to rule out any disease above the rectum that might be causing bleeding.

With the patient in the left lateral, or Sims' position, the buttocks are retracted by an assistant or, if none is available, the patient may use the right hand to retract the right buttock. A well lubricated gloved finger is gently inserted into the anus and rectum to lubricate the parts. Also a few circular movements with the finger helps to relax the anal sphincter. At the same time the degree of induration resulting from previous injections may be determined.

After inserting the speculum and inspecting the hemorrhoids, any fecal material present is wiped away and some mild antiseptic is applied to the rectal mucosa. With the hemorrhoids exposed, the needle is inserted into the submucosa and the solution slowly injected. While there is no definite rule as to the amount to be injected, the solution is injected until a definite pale swelling occurs over the ballooned-out hemorrhoid, usually from one to three cubic centimeters. The needle is left in place for thirty to sixty seconds after stopping the injection. This gives time for the edema,

which immediately occurs, to obliterate the needle puncture and prevent bleeding. Usually one or two hemorrhoids are injected at each office visit. Care should be taken not to inject too much solution as sloughing is likely to occur. Pain occurring at the time of injection is usually due to the point of injection being too low and it should be discontinued immediately. The number of treatments required varies from six to ten, depending on the number and size of the hemorrhoids.

No special after-treatment is required. Patients should be told to avoid unnecessary straining or any strenuous exercise. If one of the injected hemorrhoids should prolapse, it should be replaced by gentle digital pressure. Complications following injections are very few. Sloughing occasionally occurs, due to too much sclerosing fluid being injected. Abscess and strictures have been reported but they are relatively few and rarely occur if the proper technic is used.

REFERENCES

1. Pruitt, Marion C.: Hemorrhoids, St. Louis, The C. V. Mosby Company, 1938, p. 116.
2. Terrell, R. V., and Chewing, C. C., Jr.: The Present Status of Injection Treatment of Internal Hemorrhoids, *Am. J. Surg.* 79:44-48, 1950.

DEATHS FROM INFLUENZAL MENINGITIS ALMOST ELIMINATED BY DRUGS

A recovery rate from influenzal meningitis of 96 per cent following treatment with sulfadiazine and streptomycin is reported in June 24 *Journal of the American Medical Association*.

Before the use of sulfa and antibiotic drugs, the mortality from the disease varied from 90 to 100 per cent, according to Drs. Emanuel Appelbaum and Jack Nelson of the New York City Health Department, authors of the article.

This form of meningitis is essentially a disease of infants and young children, the doctors point out.

Of 90 patients treated, 87 recovered and three died. In the vast majority of these patients, there was marked improvement in six days after treatment with streptomycin was begun, the doctors say.

Residual damage, including deafness and defective vision, occurred in nine of those who survived.

THE SIGNIFICANCE OF NIPPLE DISCHARGE

B. T. BEASLEY, M.D.

Atlanta

A working knowledge of the anatomy and histology of the mammary gland is necessary for a discussion of its physiology.

The glands in the human are located on each side of the lower portion of the chest walls in the upper third of the mammary ridge. In the lower mammals the glands are located along the mammary ridge from the axillae to the groins. The number varies in different animals from two to fourteen, depending upon the number of offsprings the mother is capable of producing at each conception.

In animals that lie down to nurse the young the glands are located on each side of the chest and abdomen along the mammary ridge; in those that stand up to nurse, they are located in the groins, while those that hold the young in their arms for nursing the glands are located on the chest wall.

The mammary glands vary in size in the different mammals as well as in the same group of mammals. No other organ in the body shows such variations in size.

The glands with all their component parts are formed during intrauterine life and contain all the elemental histologic structures they ever contain. The anatomic units of the glands are the acini and ducts and the histologic units are the epithelial cells lining the acini and ducts. One layer in the acini and two layers in the ducts. The fibrous tissue framework and fatty pads as well as the fascia and skin act as supporting and protecting structures for the secreting glands.

The purpose of the gland is to furnish nourishment for the young offspring, hence its function is to secrete. The epithelial cells lining the acini begin secreting at birth. The infant breast may become engorged with secretion two or three days after birth producing the condition called "mastitis neonatorum". There is present a small amount of secretion in the ducts at all times. Again, the breasts may become engorged during adolescence producing "adolescent mastitis". The former is due to lactogenic stimulation from the mother, while the latter is due to hormone stimulation from the endocrine glands of the young girl herself. During pregnancy and lactation the glands become engorged again due to increased hormone stimulation. Even after menopause there is present demonstrable quantities of secretion in the breast.

It is thus seen that the epithelial cells lining the acini and ducts continuously secrete from infancy to old age. It is also seen that there are periods in the life of the individual during which secretory activity is accelerated, during infancy, adolescence and during pregnancy and lactation. This phenomenon is due to the variations in hormone stimulation to the glands. These extra hormones may be produced in the individual or they may be introduced into the individual, at different times. These periods may be divided as follows:

- I. Prelactation Interval.
 1. Infancy.
 2. Childhood.
 3. Adolescence.
 4. Girlhood.
- II. Lactation Interval.
 1. Pregnancy.
 2. Lactation.
- III. Postlactation Interval.
 1. Menopause.
 2. Senility.

During the so-called resting periods, that is between infancy and adolescence, and the nonlactating period, and senility, the epithelium of the acini and ducts is only passively stimulated. During the resting intervals there is a trace of secretion in the

ducts, some of which may be expressed from the nipples as a thin viscid secretion in the nulliparous and a thick creamy secretion in the parous breast.

During the height of the secretory periods; i.e., early infancy, adolescence and pregnancy and lactation, the epithelium is actively stimulated by lactogenic and estrogenic hormones which causes a rise in the secretory level.

This orderly pattern runs constant in the breasts of women who live unrestrained lives, and whose breasts function without interruption, according to nature's laws. Only when normal function is prevented through restraint of natural instincts or abnormally stimulated by emotional stress does the organ develop abnormal function and the physiology of the gland converted into a pathologic process. To tabulate the biologic sequence womankind was intended to take, the following events may be considered:

1. Birth followed by infancy and childhood.
2. Adolescence, the natural transformation from girlhood to womanhood.
3. A period of fertility for the purpose of reproduction.
4. Menopause, another period of transformation from that of fertility into infertility and the beginning of senility.

The same physiologic pattern is followed by other organs of the body, particularly the reproductive organs. The ovaries and womb respond to the same stimulation in an orderly fashion. The pituitary glands direct their hormones to the organ which is called upon to do a particular job as natural demands are made upon that particular organ. During pregnancy and lactation the estrogenic and lactogenic hormones are directed to the mammary gland, where the epithelial structures are stimulated for the production of colostrum and milk.

At the termination of nursing there being no further demands upon the gland to produce milk, pituitary activity is directed to the endometrium for the purpose of preparing the uterus for another fertilized

ovum. If a fertilized ovum is received by the endometrium, another cycle of pregnancy and lactation is begun. If the endometrium does not receive a fertilized ovum, and pregnancy does not take place, the pituitary is called upon to repeat the cycle for another try at pregnancy. This process continues throughout the childbearing life of the individual. Any break in this orderly phenomenon may convert a normal physiologic process into an abnormal or pathologic one. Hippocrates wrote in his Aphorisms as early as 460 B. C.: "All parts of the body which are designed for a definite use are kept in health and in the enjoyment of fair growth and of employment of which they are accustomed. But when they are disused they grow ill and stunted and become prematurely old."

It is an historic fact that the barren womb is more likely to develop fibroids than the functioning womb, and that the unnursed breast is more likely to develop neoplastic disease than the regularly nursed breast. The endocrine system which controls the secretory activity of the mammary glands is under the direct influence of the sympathetic nerves which supply the different endocrine glands. Interruption or interference with normal impulses transmitted by these sympathetic nerves causes a change in the rate of secretory activity; i.e., abnormal impulses may cause a rise or fall in the secretory level. It has been shown that emotional disturbances influence all gland activity. Unpleasant emotions such as fear, grief, etc., depress, while pleasant emotions stimulate. Sexual excitement produces in the adrenals, thyroid, the pituitary and ovaries a step-up in tempo resulting in increased activity in the mammary glands as well as the menstrual mechanism. Increased mammary stimulation produces increased activity of the epithelial structures of the acini and tubules. During lactation this is character-

ized by the production of large quantities of milk. During the so-called resting interval it is characterized by the formation of fibrous tissue or epithelial over-growth such as fibroadenoma, intraductal papilloma, and cystic disease. The relationship between these benign lesions and malignant disease is a controversial issue.

The physiology of the lactating breast is maintained by regular nursing or "milk-ing". The converse is true if the breast is not nursed. The old practice of "weaning the baby" is now frowned upon by the more progressive physicians, and mothers are advised to nurse their babies.

Nipple discharge may occur spontaneously or by manual pressure. There are two types of nipple discharge: (a) physiologic secretion, and (b) pathologic discharge. Nipple secretion containing no blood or pus in the absence of demonstrable disease has no clinical significance. Discharge containing blood or pus is significant and may indicate (a) benign, (b) malignant, or (c) inflammatory lesions. If no palpable tumor is present a benign lesion should be suspected in more than 90 per cent of the cases. If a palpable tumor is present with bloody nipple discharge, a malignant lesion should be suspected in nearly 50 per cent of the cases. If the lesion is small an intraductal papilloma should be suspected in more than 50 per cent of the cases. If the breast presents evidence of inflammation as characterized by pain, redness and swelling, either infection, plasma cell mastitis or so-called inflammatory carcinoma should be suspected. Examination of the discharge should aid in making a differential diagnosis.

The normal expectancy of cancer of the breast in all women is 0.42 per cent. The expectancy of cancer in breasts showing abnormal signs is as follows:

1. Chronic cystic mastitis.....	0.88%
2. Adenomas	2 %
3. Cystic disease	0.79%
4. Intraductal papilloma	6 %

5. Mastodynia	None
6. Bloody discharge without palpable tumor	9 %
7. Bloody discharge with palpable tumor	33 to 44%

Conclusions

1. Normal or physiologic discharge is a secretory product of the epithelial cells of the acini and milk ducts, and does not indicate disease.

2. Abnormal or pathologic discharge is not a secretory product of these cells. It may be blood escaping by way of the nipple as a result of trauma or disease; or it may be pus, the result of infection in the ducts or in the breast which is draining through the ducts.

3. It is possible to obtain both normal and abnormal discharge from the same breast. There may be a bleeding intraductal papilloma from which blood can be expressed; or it may bleed spontaneously, and at the same time normal appearing secretion may be expressed from a healthy segment of the breast. This is possible even in the presence of a palpable tumor, either benign or malignant.

4. Perverted physiology or abnormal function of an organ predisposes to disease.

ENDOMETRIOSIS: THE URGENCY FOR EARLY DIAGNOSIS AND TREATMENT

EDGAR H. GREENE, M.D.

Atlanta

The frequent occurrence of endometriosis in young women prompted me to bring the subject here for your consideration.

With the exception of pelvic inflammatory disease, no benign pathologic process is more crippling to young women than endometriosis.

Etiology

As a result of his widely accepted theory, Sampson in 1921 suggested that certain free

and loose endometrial tissue (or tubal epithelium) frequently is transferred to another location in the pelvis, and becomes implanted on tissue for which it has an affinity and begins a secondary growth. These scattered islands of endometrial tissue implanted on an ovary have a tendency to menstruation which frequently results in a cystic formation. This newgrowth is usually known as a "chocolate" cyst because of the color and consistency of its contents.

It seems to be generally believed that a likely explanation of the dissemination of viable endometrial cells in the pelvis is by exfoliation or expulsion of the cells through the fimbriated ends of the fallopian tubes. Mild uterine contractions may bring about a back flow of menstruum if the cervix is blocked. Implantation as described by Sampson¹.

In support of the theory of "reflux" menstruation reference is made to an observation by Dr. Robert Pendergrass and me² in an original study of lipiodol injections of the uterus and fallopian tubes and reported before this Association at its 1927 meeting in Athens. "With slight pressure upon the syringe plunger, there was noted a 'peristaltic-like' action of the fallopian tube and in some cases there appeared to be a spasm of the isthmus which prevented the passage of the oil until the spasm disappeared, whereupon the gentle pressure from below easily forced the iodized oil through the patent tube. It is not unlikely, therefore, that with an occluded cervical canal, mild uterine menstrual contractions may produce a retrograde menstruation."

It has been suggested that endocrine dysfunction and also embryologic development has a place in the etiology of endometriosis. Dr. Wolbach of the Nutrition Foundation, who recently made a talk in Atlanta, has found on histopathologic examination of infants' uteri that there is a degeneration of

the epithelial surfaces by a keratinization which was found (by rat experimentation) to be reversible by adequate vitamin A diet. This observation may prove of definite value in the treatment of endometriosis. Whatever the cause and/or pattern of dissemination, the rate and duration of growth, age of patient, fertility or sterility, time of surgical intervention and mode of treatment, determine the ultimate degree of involvement in a given case since endometriosis is a chronic progressive disease.

The impression is rather general that endometriosis is very rare in youth. Among the many articles written on this subject during the past twelve years, is the report in 1946 by Fallon⁶ of Massachusetts. Of 225 patients with proved endometriosis 9 (or 4 per cent) were of 'teen age, the youngest being 13. If he had included others macroscopically unmistakable but microscopically unproved, the 4 per cent incidence in his series would be doubled.

Since endometriosis tends to occur a few years after puberty it is incumbent upon us to acquaint parents of its serious nature and disabling results. Following the early manifestations of abnormal menstruation the girl should promptly seek the advice of her physician.

History and Symptoms

A careful history may elicit a fairly definite clue. Unfortunately, the laboratory and x-ray studies cannot aid in the diagnosis. Any of the following symptoms should suggest a possibility of endometriosis:

1. Following some months of apparently normal menstrual cycles, acquired dysmenorrhea with increasing severity develops.¹⁰
2. Severe colicky pain low in abdomen during menses radiating to sacral and coccygeal areas.
3. International (ovulatory) pain. Menorrhagia, metrorrhagia, clots.
4. Rectal pains during menstruation. Tenesmus. Gas pains (intestinal implants).
5. And in the married, unexplained sterility. Dyspareunia. (tenderness in the cul-de-sac).
6. *In any abdominal pain after puberty, endometriosis should be considered.*

Physical Findings and Diagnosis

1. Small nodules, always tender, but more so during menstruation are palpable in the uterosacral area. Rectal examination one or two days before menstruation is desirable.³

2. Abnormal position of uterus, especially retroversion with tenderness and tendency towards fixation. The uterus may be moderately and diffusely enlarged and firmly adhered in the pelvis. In the differential diagnosis pelvic inflammatory disease and malignancy must be considered.

3. Marked ovarian tenderness with cystic formation; with or without adhesions.

4. The clinical diagnosis of endometriosis is difficult, but acquired dysmenorrhea of varying progressive severity may be considered pathognomonic.⁵

In many cases the definite diagnosis may not be made until operation is performed.

Findings at Operation

At operation may be found retroperitoneal extension along the parametrium producing induration and adhesions in the area of the uterosacral ligaments. Implants often become adhered to the intestine and sometimes infiltrate the muscularis of its wall.⁴ These implants spread with considerable rapidity and involve one or both ovaries with the familiar dark, sanguine (chocolate) cyst.

Recently Javert¹¹ of Cornell University suggested that "benign endometrial cells are capable of dissemination and metastasis along the same channels followed by endometrial adenocarcinoma. Pathologists should look for this lesion as well as for carcinoma in pelvic nodes removed by radical operation."

Incorporated in this paper are a few selected illustrative cases:

Case 1. A chocolate cyst ruptured in a young married woman as she was preparing to leave her office work about 5 o'clock in the afternoon. The pain was similar to a ruptured tubal pregnancy although she did not faint. About three hours later, at operation,

the large tear was found in the ovary. Considerable chocolate-like material was dissipated through the area. Numerous implants were found on the opposite (normal) ovary and intestine in scattered areas. These implants varied in size from that of a pin head to a pea, and tenaciously stuck to the host.

This type of case, rarely encountered so early, is mentioned to show the rapidity with which the released implants left the ovary and attached themselves to adjacent organs and neighboring bowel.

Treatment

In all young women found to have a retroverted uterus and dysmenorrhea, the early use of a Smith or Hodge type pessary to elevate the uterus together with hot sitz baths and douches may relieve the constriction in the canal and allow free flow of the menstruum with amelioration of the discomfort. This may prevent the development of endometriosis.

After removal of the pessary, should displacement and symptoms recur, then conservative surgery is advisable (i.e., D. & C., uterine suspension). Examination of the ovaries determine diagnosis and further procedure. All uninvolved ovarian tissue should be left in situ to offer some chance for subsequent pregnancy. The condition should be carefully explained to the parents of a young girl. Likewise a young married woman should know that her days of fertility may be only a matter of months and if she desires pregnancy it should not be delayed. Recurrences are probable in about 25 per cent or even more and those concerned should be apprised of this outlook.

For several years it has been my practice to sprinkle sulfathiazole crystals over the pelvic structures including particularly the remaining ovarian tissue after the surgery is concluded. Subsequently reaction to a foreign body may develop but I am of the opinion that the sulfonamide retards the activity of the process and lessens the recurrences with no deleterious effect resulting from the reaction.

Case 2. Mrs. H. W. C., aged 24, married 3 years, no pregnancy. She was operated on July 5, 1944. A large chocolate cyst of right ovary with hypertrophied adherent tube was found and removed. Two hemorrhagic cysts were resected from left ovary.

On recovery the situation was explained to her. She desired a baby and in the fall of 1946 she had a normal delivery.

In the spring of 1949, five years after the first operation, a left ovarian cyst was diagnosed. At operation, June 6, 1949 the left cystic ovary, fallopian tube and uterus were removed. Extensive intestinal and pelvic adhesions were encountered. The diagnosis of endometriosis was microscopically proven. Her subsequent progress has been satisfactory.

Case 3. On July 24, 1940 Miss A. B., aged 32, had right salpingo-oophorectomy. The left ovary was partially cystic and resected. She married about four years later but no pregnancy has occurred. Regular examinations indicate that there is no recurrence. Now that she is 42 years of age with symptoms of beginning menopause, it is reasonable to expect no subsequent disturbance.

No medical treatment alone of proven value has been offered for endometriosis. Chemotherapy and the antibiotics have been of no definite benefit, except possibly by topical application. Endocrine therapy is of doubtful value although stilbestrol is strongly advocated by Karnaky⁷ of Texas. Indeed it would seem logical to believe with many observers that estrogenic therapy will aggravate the condition. The male sex hormone may retard the activity of the aberrant endometrial cells, but the use of testosterone in young women is probably too hazardous to consider when the results are so doubtful.

At present surgery is the procedure of choice. It should be conservative in women under 35 for reasons previously emphasized.⁹

If the patient is near the menopausal age and there is extensive pelvic involvement, surgery probably should not be limited to extirpation of the ovaries but extended to include removal of the uterus and fallopian tubes.

Without ovarian stimulation, which is essential to survival of the endometrial implants, the cells become inactive, followed by a regression of symptoms.

Removal of each individual implant is tedious and unnecessary. Frequently they involve the bowel, the recto-vaginal septum, the uterovesical peritoneum and occasionally the bladder wall.

In one's desire to remove all the involved

tissue, unnecessary and serious complications may result. It is wiser to leave a portion of the uterus attached to the bladder or leave some of the involved tissue in the area of the lower uterine segment and the rectum than to exhibit too much technical boldness. A postoperative fistula in either locality would be, to put it mildly, most unfortunate.

The abdominal operation should be used.⁸ Vaginal approach is more difficult and hazardous because of probable fixation of pelvic organs and frequent intestinal adhesions; moreover, the surgeon is unable to explore the pelvis and lower abdomen.

Conclusions

1. The frequency of endometriosis, particularly in young women, is brought to your attention. Its disabling and sterilizing effect is emphasized.

2. The value of informing mothers and young women of symptoms and urgency of early diagnosis and treatment is stressed.

3. The differential diagnosis, particularly from neisserian infection and malignancy, is important and demands careful studies and examinations.

4. Local treatment may be of benefit (i.e., pessary, douches, sitz baths), but if satisfactory results fail to develop promptly then surgery should not be delayed.

5. Sound surgical judgment is necessary in every case: A conservative procedure in the young should be followed, while a more radical operation is advisable in older women.

REFERENCES

1. Sampson, J. A.: *Am. J. Obst. & Gynec.* 40:549-557 (Oct.) 1940.
2. Greene, E. H., and Pendergrass, R. C.: *J. M. A. Georgia*, vol. 16, no. 12 (Dec.) 1927.
3. Morse, A. H.: *Connecticut M. J.*: 768-770 (Oct.) 1945.
4. Randall, C. L.: *J. A. M. A.* 139:972-976 (April 9) 1949.
5. Kelley, Francis J., and Schlademman, K. Ramsey: *Surg., Gynec. & Obst.* 88:230-236 (Feb.) 1949.
6. Fallon, John: *J. A. M. A.* 131. 1405-1406 (Aug. 24) 1946.
7. Karnaky, K. J.: Chicago, *The Year Book of Obstetrics & Gynecology*, 1949, p. 464-466.
8. Thierstein, S. T., and Allen, Edward: *Am. J. Obst. & Gynec.* 51:635-642 (May) 1946.
9. Stephenson, Richard T., and Graffagnino, P.: *South. M. J.* 35:525-529 (May) 1942.
10. Dannreuther, W. T.: *Am. J. Obst. & Gynec.* 41:461-474 (March) 1941.
11. Javert, Carl T.: *Cancer* 2:399-410 (May) 1949.

THE ROUTINE USE OF EXFOLIATIVE CYTOLOGIC EXAMINATIONS FOR THE DETECTION OF ASYMPTOMATIC CANCER OF THE CERVIX UTERI

H. E. NIEBURGS, M.D.

and

S. BAMFORD, M.S.

Augusta

Papanicolaou's contribution of exfoliative cytology for the recognition of cancer cells in smears or body fluids presented a great progress in cancer diagnosis. Its value for some time a matter of much controversy and confusion is now shaping into a more definite form. Though not yet entirely satisfactory, greater knowledge and improved technics increasingly raise the percentage of diagnosed cases. Exfoliative cytology found its main use for the diagnosis of uterine cancer. However, most cases of cervical cancer diagnosed by Papanicolaou's method are clinically evident and are recognized in the biopsy specimen which is usually taken in conjunction with the smear. In this connection much criticism arose as to the necessity and value of vaginal smears in addition to or preceding biopsies.

The credit for throwing more light on this problem and for defining the true value of the method is due mainly to Pund and others who demonstrated by the sequence in the rising age groups with pathologic changes in the cervix that cancer of the cervix is apparently preceded by a neoplastic growth which remains in the non-invasive phase for an average of six to twelve years.^{1 2}

Pund's and Auerbach's findings indicated a high incidence of preinvasive cancer of the cervix uteri in the female population

and on the basis of their observations it became apparent that exfoliative cytology may prove the method of choice for the detection of sub-clinical cancer.

Detection by Exfoliative Cytology

An attempt was made to investigate the method of exfoliative cytology as a screening procedure and to determine whether its use on a large scale was practical and economical. Patients attending the University Hospital clinics and a certain number of private physicians' offices were routinely screened. The smears are taken with a cotton applicator in preference to other devices. (Figs. 1 and 2). Certain instructions are observed, such as to advise the patient to refrain from taking a douche before the examination, or preparation of smears before a lubricant is used. Furthermore, the cervix should not be swabbed before the introduction of the cotton applicator and an additional smear should be obtained after the removal of a mucus plug. Slides are fixed in a solution of equal parts of ether and 95 per cent alcohol before drying has occurred. In such cases in which smears have to be mailed to the laboratory, the slides are removed from the ether-alcohol solution after at least ten minutes' fixation, a drop or two of glycerin is released onto the slide and then covered by another clean slide.

Up to date more than 20,000 women above the age of 19 were screened in this manner. Repeated compilation of data on equal numbers of cases appear to confirm each time previous results. The incidence of preinvasive cancer is found to be about 1 per cent, while that of invasive cancer was about 1.5 per cent.² The percentage of the latter is however progressively decreasing. Whether this decrease in the incidence of invasive cases is directly due to the greater detection of preinvasive cancer cannot be established as yet, but it offers an inter-

Read before the Medical Association of Georgia in annual session, Macon, April 19, 1950.

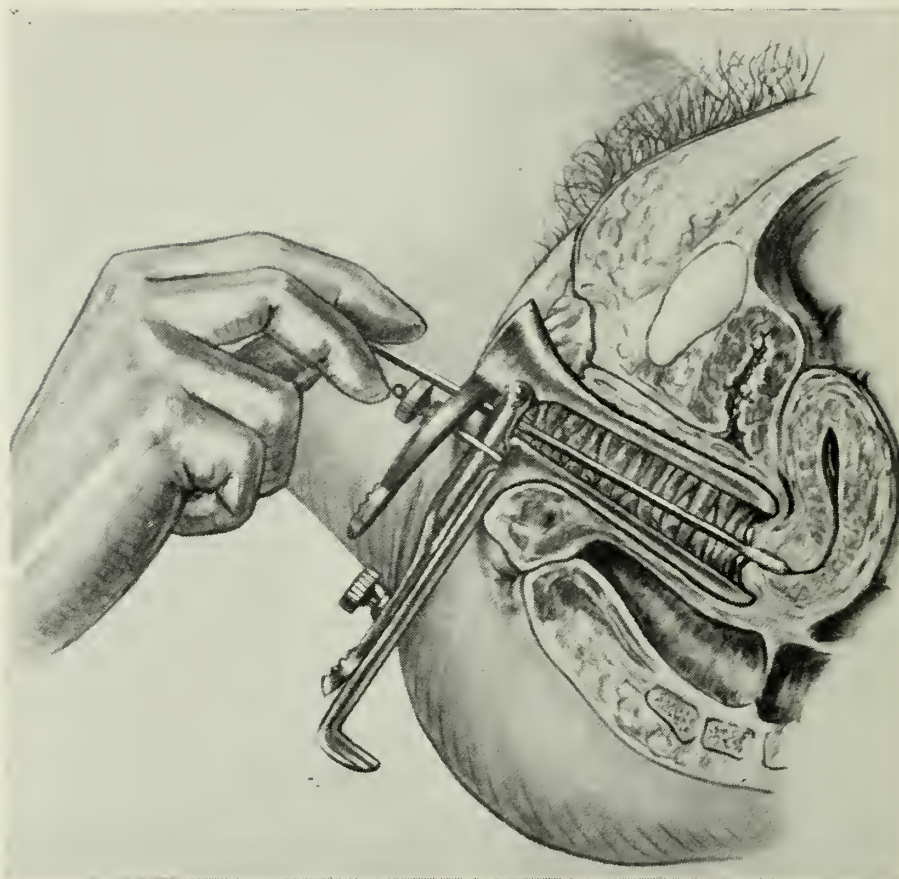


Fig. 1. The cotton applicator should be well introduced in the endocervical canal and the junction of the squamous and columnar epithelium swabbed.

esting thought.

The particular effort made to diagnose cervical cancer in its preinvasive phase very soon directed attention to the specific morphology of cells exfoliated from a non-invasive cancer.³ The increasing knowledge of the preinvasive cancer cells greatly enhances the detection of cervical cancer in the incipient stage. Many cell types which at present are known to derive with certainty from a non-invasive cancer were previously classified as Papanicolaou Class II, which denotes absence of malignant changes. Patients with Class II smears are not immediately investigated though kept under periodic observation. Failure to recognize the "preinvasive cancer cell" may in most cases not reveal the cancer until it has advanced to the invasive stage. A further difficulty in this connection is presented by the

fact that the diagnosis of the "preinvasive cancer cell" cannot be accomplished according to certain criteria but has to be made not infrequently by comparison. Experience with a large number of cases is in this respect of particular importance.

The "preinvasive cancer cell group" should be distinguished from Ayre's "pre-cancer cell complexes". The latter, according to Ayre,⁴ denote cells which eventually may or may not develop into a preinvasive cancer, while cells of the "preinvasive cell group" are those which have exfoliated from a cancer area though not invasive.

Diagnosis by Biopsy

The number of cases in which suspicious and positive smears require confirmation by biopsy was about 3.2 per cent, but it is now progressively decreasing with the im-

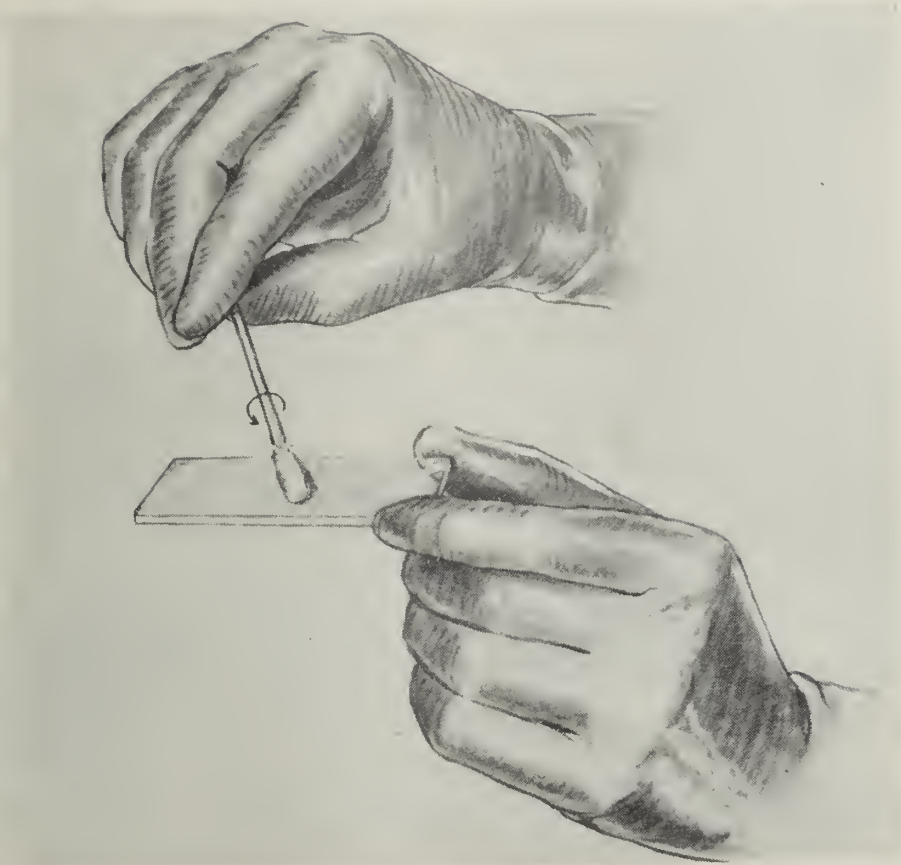


Fig. 2. The applicator is rolled and should not be smeared upon the slide.

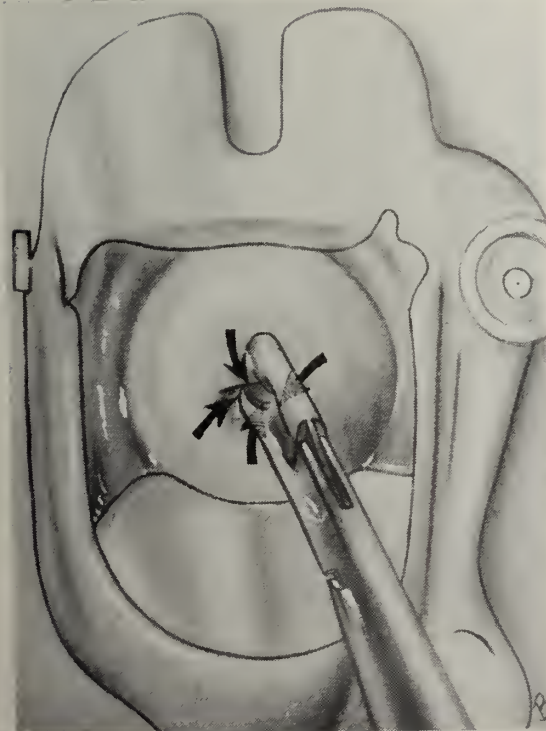


Fig. 3. Biopsies taken in four to five positions around the squamo-columnar junction enhance the likelihood of finding the cancer area.

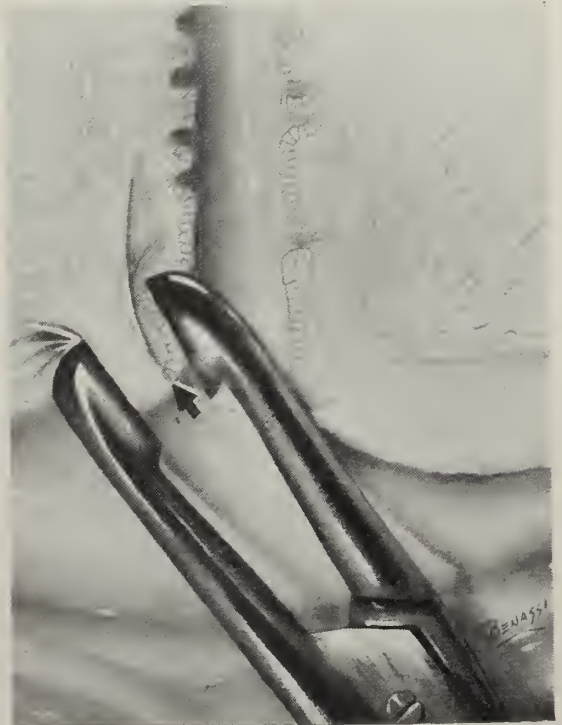


Fig. 4. The biopsy punch is placed in such a manner as to obtain material from the junction of the columnar and squamous epithelium.

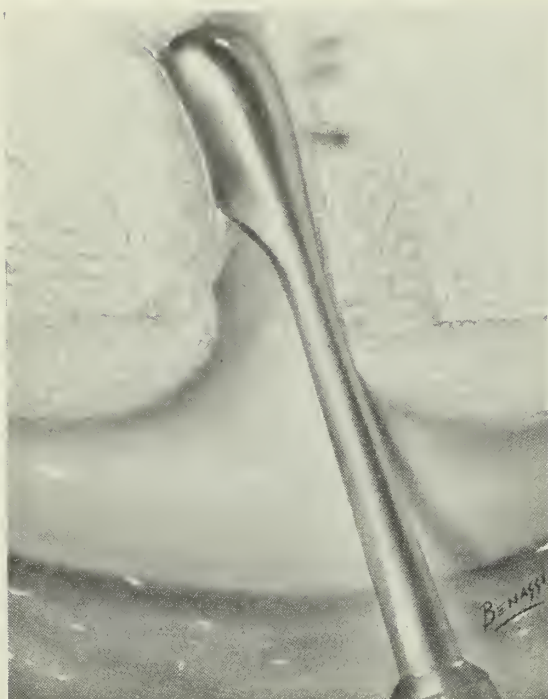


Fig. 5. Curetting of the endocervical canal may reveal a cancer missed by biopsy or show the extent of possible invasion.

proving knowledge of exfoliated cancer cells. Cases of Papanicolaou's Class IV and V, and perhaps Class III with negative biopsies do not necessarily fall into the group of false positives. A negative biopsy indicates solely that no cancer is found in the specimen submitted to the pathologist. Often, however, insufficient biopsy material has been obtained, or the cancer area was missed regardless of the fact that multiple biopsies were taken in four or five positions around the junction of the squamous and columnar epithelium of the cervix.⁵ The choice of the biopsy punch is important in order to obtain a clean cut portion from the cervix. In our experience, the Gellhorn punch appears to be the most satisfactory for biopsies (Figs. 3 and 4).

Endocervical Scraping

A preinvasive cancer found in a biopsy specimen does not include the presence of invasive cancer in regions other than that from which the biopsy has been taken. In order to establish whether, in addition, any invasion is present Pund suggested curetting

of the endocervical canal in every case in which a biopsy is obtained.⁶ The practice of this procedure has shown that endocervical scrapings are of additional value in such cases in which biopsy specimens failed to reveal the cancer area while it was present in the material obtained from the endocervical canal (Fig. 5). Endocervical scrapings should be sent to the pathologist in containers separate from those containing the biopsy specimens.

Histologic Interpretation

The last phase in the diagnosis of cervical cancer is dealt with by the pathologist. The material removed from the cervix by biopsy or endocervical scrapings, though bearing the cancer area, has to be submitted not infrequently to the cutting of serial sections from serial blocks in order that the cancer may be found. Biopsy material submitted to the pathologist which was taken on the basis of a previous cytologic diagnosis should be accompanied by the cytologic report. In the absence of such a report the material is treated in the routine manner with the result that a cancer area may be missed. Not infrequently there is another factor, which may obscure the final diagnosis of cancer, that is the present controversy of opinion among pathologists as to what constitutes a preinvasive cancer. Neoplasia limited to the basement membrane is considered by us a preinvasive cancer, while others refrain from making a diagnosis of cancer unless it is invasive. A cancer in the lumen of a gland is, according to Pund, a preinvasive cancer as long as it is confined to the natural surfaces, while Te Linde and others maintain that the presence of a cancer in the gland constitutes invasion.

Observation and Follow-up of Patients

In order that an investigation may be carried to final diagnosis a number of facts should be considered. A patient in whom biopsy and endocervical scrapings were

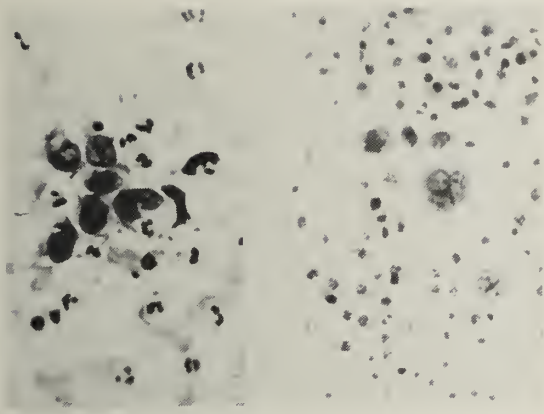


Fig. 6. Invasive cancer cells.

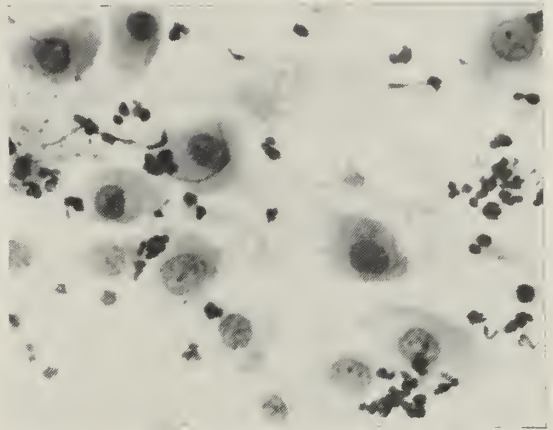


Fig. 8. Preinvasive cancer cells detected mainly by comparison. (Note nuclei with increased nucleoli and condensation of nuclear borders.)

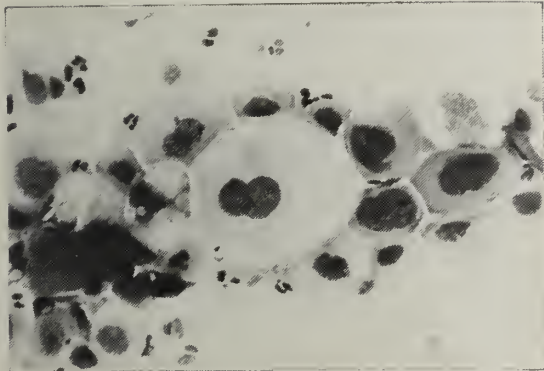


Fig. 7. Characteristic preinvasive cancer cell group.

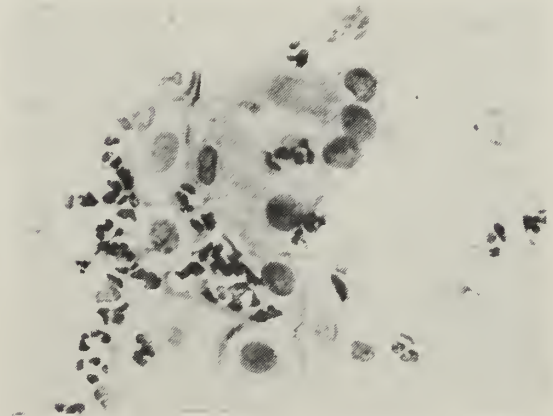


Fig. 9. Cell dyskariosis not associated with cancer.

negative following a positive cytologic report should be kept under observation by repeated endocervical smears. These should be taken after healing of the cervix has occurred, and in case the smears are positive the biopsy should be repeated. Smears following biopsy too closely frequently show atypical cells due to regenerating epithelium.

A well coordinated method of observation in collaboration with the cytologist is required in most cases in which patients have had smears of an equivocal type or suspicious cells which may indicate the possibility that malignant changes may occur at a later stage. In our experience, some cases were diagnosed in this manner at a very early stage.

Economic Factor

The cytologic examination of slides taken routinely for the detection of preinvasive cervical cancer should be treated in a dif-

ferent manner than individual cytologic and histologic diagnoses. The expense of cytologic diagnosis, though reasonable for individual cases, is usually too high to adopt the method for routine screening of all female patients. Since it was observed that 80 per cent of all cases of preinvasive cancer detected by exfoliative cytology were asymptomatic, it is evident that such cases will be missed when the expense of cytologic examination limits the physician to the use of the method to a selective type of patient. Thus a special procedure arranged solely for the detection of subclinical cervical cancer, adequate for routine use regardless of whether a patient desires the test or is able to meet the expense, may establish an efficient method of preventive oncology and progressively decrease the incidence of in-

vasive cancer.

Organization of a Cytologic Laboratory

Four years' experience in the organization of a cytologic laboratory has demonstrated that the knowledge of exfoliative cytology cannot be acquired by a two or four weeks' course in cytology nor by a theoretic study of the criteria for the diagnosis of cancer cells. A large number of diagnoses are made purely by comparison (Figs. 6, 7, 8, and 9), and the examination of a large amount of material is necessary before a satisfactory standard of efficiency can be reached. Preferably a trained cytologist should limit himself to the interpretation of doubtful slides and should devote most of his time to the study and classification of certain cell types in order that they can be readily available whenever similar types of cells are encountered for diagnosis. In addition, a well trained cytologist should be concerned with the screening of doubtful slides passed on from technicians who carry out the actual screening of the material. Thus for efficient function of a cytologic center at least four to six members are required: a technician for the staining of slides, two technicians for screening with one cytologist for the screening of doubtful slides, a specialized cytologist and a secretary. In the early phases of a newly established laboratory four members may suffice without the two screening technicians.

Conclusion and Summary

In conclusion it can be stated that the diagnosis of cervical cancer in the incipient phase depends on the use of exfoliative cytology as a routine procedure. It should be available economically to every physician or patient with adequate facilities for cytologic interpretation. An efficiently organized cytologic center is of fundamental importance for cancer detection. Thorough knowledge of the physician as to the problem involved, and his close cooperation with

the cytologist and pathologist is a necessary prerequisite. Furthermore, the attitude of the pathologist and his collaboration with both the physician and cytologist may determine the number of cases detected. Cancer diagnosis in the subclinical stage is thus a teamwork of members adequately qualified in the organization and function of their particular phases. A further point of importance is the proper instruction of the patient as to her condition and adequate explanation for the need of proper investigation by either repeated smears or biopsies.

REFERENCES

1. Pund, E. R., and Auerbach, S. H.: Preinvasive Carcinoma of the Cervix Uteri, J. A. M. A. 131:960 (July 20) 1945.
2. Nieburgs, H. E., and Pund, E. R.: Detection of Cancer of the Cervix Uteri, J. A. M. A. 142:221 (Jan. 28) 1950.
3. Nieburgs, H. E., and Pund, E. R.: Specific Malignant Cells Exfoliated from Preinvasive Cancer of the Cervix Uteri. Am. J. Obst. & Gynec. 58:532, 1949.
4. Ayre, J. E.: Diagnosis of Precinical Cancer of the Cervix. Cervical Cone Knife; Its Use in Patients with a Positive Vaginal Smear. J. A. M. A. 138:11 (Sept. 4) 1948. Ibid: Cervical Cytology in Diagnosis of Early Cancer. J. A. M. A. 136:513 (Feb. 21) 1948.
5. Foote, F. W., Jr., and Stewart, F. W.: The Anatomical Distribution of Intraepithelial Epidermoid Carcinoma of the Cervix, Cancer 1:431, 1948.
6. Pund, E. R., and Echols, J. M.: Subclinical Carcinoma of the Cervix Uteri, J. A. M. A. In press.

THE CLINICAL IMPLICATIONS OF THE RH FACTOR

E. B. SAYE, M.D.

Thomasville

Every doctor is confronted in one way or another by the problem of the Rh factor. Although he may seldom need to apply his knowledge of the factor in practice, he will frequently be asked to explain its significance to some of his patients. The physician can find the information in numerous excellent articles. Yet, some of the literature is so cumbered with technical terms that it may be difficult for him to unravel the usable facts that it contains. Surprisingly, the subject has not yet been presented at any meeting of this Association. These thoughts prompt the preparation of this paper, the sole aim of which is to state the

From the Laboratory of Pathology, the John D. Archbold Memorial Hospital, Thomasville, Georgia.

Read before the Medical Association of Georgia in annual session, Macon, April 19, 1950.

essential facts pertaining to the Rh factor and to give the current views of pediatricians, obstetricians, and pathologists regarding the care of patients who are affected by sensitization to the factor.

Blood Groups and Types Other Than Rh

The familiar A, B, and O properties of the blood were discovered and fully investigated early in the present century. Consequently, blood transfusions, which had previously been infrequent and dangerous, are now made daily in multiplied numbers and with comparative safety. Minor variations in the A and B groups were soon recognized, which subgroups may on rare occasions bring about transfusion reactions even though the donor and the patient belong in the same major group. Later, three other distinct varieties of human blood were identified. These are not called groups, but are designated as types M, N, and P. They are unimportant clinically.

Nature of the Rh Type

The Rh type, the latest to be described, was not known until the beginning of the last decade. In 1940, Landsteiner and Wiener announced the finding of a hitherto unrecognized property in human blood. They found that the serum of a rabbit which they had immunized by the injection of erythrocytes from a rhesus monkey would, when mixed with human blood, produce agglutination of the red cells in at least 85 out of every 100 persons. Taking the first two letters of the word rhesus, they gave to the newly discovered factor the name Rh. They designated as positive persons whose red blood cells contain the factor, and as Rh negative individuals in whose cells it is lacking.

In 1940 and early in 1941, Wiener, Levine, and their associates revealed the clinical importance of the Rh factor. They showed that severe reactions might follow the transfusing of Rh positive blood into an

Rh negative person, and demonstrated that Rh negative mothers could become so sensitized to the Rh positive cells of their babies that the infants would be born with hemolytic disease, or die in utero.

The present concept of the Rh type is that it includes eight subtypes, seven of which are positive. Besides these, certain reciprocal properties exist regularly in Rh negative cells, which properties collectively are called the Hr factor. Moreover, some confusion has arisen because various investigators have classified and named the subvarieties of the Rh-Hr series differently. Nevertheless, the matter of the subtypes need not disturb us greatly; for, although it is possible for an Rh positive mother to become sensitized by the Hr factor or by subtypes different from those in her own blood, actually more than 90 per cent of the mothers who become sensitized are Rh negative and are sensitized by the kind of cells that were originally called Rh positive, but which are now most commonly designated Rh₀.

The Rh type, whether negative or positive, is a normal inheritance, and is not in any way related to health or disease. It is transmitted through successive generations in accordance with Mendel's laws. Present at birth, the type does not become modified by the transfusion of blood or by any other circumstance, but remains throughout life as a permanent mark of identity. The incidence of positive and negative findings is the same in both sexes. The number of Rh positive individuals is higher in Negroes than in white persons, and is said to approach 100 per cent in some of the yellow races.

The properties of the Rh factor most important to remember are: that it can act as an antigen, and that it may be positive in a baby and negative in the mother. Upon these facts depend the phenomena of sensi-

tization which are sometimes manifested after transfusions, and during or following pregnancy.

Antigen-Antibody Relationships

Antigens are substances which, when introduced into a human or animal body through some other route than the alimentary tract, lead to the formation of antibodies. These antibodies can be detected in the blood serum of the immunized person or animal. They react specifically upon the particular antigen that engendered their development. Thus, the injection into a rabbit of the red blood cells of a sheep leads to the development of antagonistic substances which can clump or dissolve sheep erythrocytes, but which are without effect upon the cells of other animals. Similarly, the transfusion of Rh positive blood into any Rh negative person, male or female—or the entrance of the Rh positive cells of a fetus into the blood of its mother—may result in the formation of anti-Rh substances capable of agglutinating or hemolyzing Rh positive red blood cells. Time is required for the elaboration of antibodies, so that repeated transfusions, or more than one pregnancy, are necessary to their appearance. When the antibodies have once been formed, however, they persist and may be increased by any further addition of Rh positive blood.

Sensitization to the Rh Factor

Anti-Rh agglutinins and hemolysins are never present in human blood serum normally, but are always artificially induced, and always denote the effort of Nature to overcome an alien invader. Rh antibodies have no effect upon the health of the immunized person, and give no outward indication of their presence, unless the serum is again brought in contact with Rh positive cells. Such conjunction of antigen and antibody may occur in any Rh negative individual, male or female, who has previously received a transfusion of

blood from an Rh positive donor, and who, at a later time, is given another transfusion of Rh positive blood. An Rh negative woman may have been sensitized to Rh positive cells by a transfusion earlier in life, and therefore be liable to danger from a similar transfusion during pregnancy. The transfusion reactions which follow Rh incompatibility are identical with those which result from differences in the ABO groups.

Independently of any blood transfusion, Rh antibodies may develop in an Rh negative woman during pregnancy solely because Rh positive cells from the fetus have gained entrance into her blood. Normally, the maternal and the fetal blood do not mingle, although they are separated in the placenta by only a narrow membrane. When, therefore, actual interchange of blood does take place, some break in the continuity of the placental vascular walls is assumed to explain the abnormal phenomenon.

The formation of Rh antibodies is not inevitable. Indeed, nearly half the Rh negative mothers whose husbands and babies are Rh positive are incapable of producing anti-Rh substance in harmful quantity.

The Rh positive cells of the fetus which sensitize the mother are inherited from its father. If the Rh type of both parents is the same, naturally there will be no antibodies formed.

Heredity of the Rh Factor

Hereditary characteristics, including the Rh property, are believed to reside in genes attached to the nuclear chromatin of germ cells. In the fertilized ovum, which ultimately becomes the individual, half the chromosomes; and, therefore, half the future characteristics of the child, are contributed by each parent. If either of the parents is Rh positive, some of their children may be Rh positive and others Rh negative. If both parents are Rh negative,

only Rh negative children will be born to them.

This, the Mendelian theory assumes, is because the Rh negative gene is a paired structure, with each member of the pair alike and purely negative; whereas the positive gene, also a paired structure, may either be pure, having both components alike, or be impure, with a dominant half positive and the other half negative. A domino with two blank spaces might represent an Rh negative gene; one with a blank at one end and dots at the other, an impure Rh positive gene; and one with dots on both halves, a purely positive gene. The person who carries only positive, or only negative, genes is said to be homozygous, and one who has genes with mixed positive and negative potentialities is called heterozygous. The genes themselves are also referred to as homozygous or heterozygous, depending upon whether they are pure or are of mixed variety.

Hence, if the husband is heterozygous, it is still possible that the wife may bear a normal Rh negative baby, even though she has borne an Rh positive one and has been sensitized to the Rh factor. If either parent of the Rh positive husband is Rh negative, he is heterozygous.

Diagnosis of Hemolytic Disease

In every case of Rh sensitization, our primal concern must necessarily be for the child. The mother, if she receives no transfusion of Rh positive blood during pregnancy, labor, or the puerperium, will not be affected by the antibodies she carries. The baby, however, may suffer much damage throughout fetal life; and, if it survives, may give clinical evidence, at birth or soon thereafter, of the injury it has sustained.

The abnormal changes which occur in the fetus, and which continue in neonatal life, all depend upon: the continuous destruction of fetal blood cells by antibodies

derived from the mother, the effort of the fetus to reconvert and utilize the end products of hemolysis, and the attempt to restore both the volume and the cell content of the depleted blood.

The lesions in the newborn infant include: anemia, increased numbers of nucleated red cells in the circulating blood, hyperactivity of the bone marrow and foci of blood production outside the marrow, icterus, enlargement of the liver and spleen, local or generalized edema, and degeneration and bile pigmentation of cerebral basal ganglia.

The name erythroblastosis was formerly used to include all the manifestations of Rh sensitization in the baby; and, indeed, the occurrence of immature red blood cells is almost always a conspicuous finding. At present, however, the clinical entities are usually placed in three separate classifications: Congenital hemolytic anemia, icterus gravis, and hydrops fetalis; and the term *hemolytic disease of the newborn* is commonly applied to the whole group.

The mortality rate for the entire group of hemolytic diseases of the newborn is well over 50 per cent. Hydrops fetalis is invariably fatal and usually ends in stillbirth. Fortunately, it is extremely rare. The icteric variety is the one most frequently seen. The preponderantly anemic type has the most favorable prognosis.

The possibility of hemolytic disease ought to be borne in mind in the case of any infant born of an Rh negative mother. The Rh type of the child should be immediately ascertained, and a simple study of the blood made to determine the amount of hemoglobin and the number and appearance of the red cells.

Ordinarily, there is neither marked pallor nor jaundice for several hours. When either of these signs is intense at birth, when they are accompanied by enlargement

of the liver or spleen, or when there is focal edema, the finding points to a long antenatal duration of the disease process.

The blood picture is likewise only moderately altered, with a hemoglobin reading of 10.5 to 11.5 grams; three to four million R. B. C. per cu. mm.; 20 to 25 nucleated red cells per 100 W. B. C., among which are a few erythroblasts. Similar changes in the blood may result from prematurity, prolonged anoxia, or intracranial hemorrhage.

The diagnosis, then, will rest partly upon clinical evidence and partly upon the history. The baby is feeble or ill; it is anemic or jaundiced; and it is Rh positive. Anti-Rh substance may or may not have been demonstrated in the mother's serum. In some of the cases a positive Coombs test for Rh antibodies in the baby's serum may furnish corroborative information, but reagents for the performance of the test are not generally available. The firstborn is rarely affected. There is often a history of recurring miscarriages or stillbirths, and of other siblings gravely jaundiced soon after birth.

The differential diagnosis is not easy. In icterus neonatorum the infant is not ill. Symptoms of congenital atresia of the bile ducts do not appear early. In both of these conditions, and in malformations of the heart, the red blood cells are usually not decreased. The prenatal care of the mother should have precluded the likelihood of congenital syphilis.

Management of Cases of Rh Sensitization

The management of cases of potential or actual Rh sensitization imposes a two-fold responsibility upon the physician: to discern any increase in the amount of anti-Rh substance in the mother's blood during the final trimester of gestation, and to secure in advance a suitable donor who will be immediately available if the baby should need blood.

When the physician first assumes the care

of an obstetrical patient, he should find out her Rh type. The State Department of Health will make the examination gratis. If she is Rh positive, there is no reason for further concern. On the other hand, if she is Rh negative, it will be desirable to know the Rh type of the husband and helpful to inquire whether any previous conception has terminated unfavorably, and whether the patient has had transfusions of blood in the past. Seldom does sensitization to the Rh factor occur in a primigravida; but, in a second or later pregnancy, a history of previous transfusions, or a history of miscarriages, may be portentous.

It is our practice to have the mother's blood examined for Rh antibodies during the sixth month of gestation, and again a month later. The antibodies develop mainly during the last trimester. They are of two kinds: agglutinins, and blocking antibodies; both kinds have the same significance clinically, and the presence of either is indicative of sensitization. Whenever there is an increasing antibody titer, the obstetrician may decide to induce labor, believing that prematurity will be a lesser hazard for the child than that of exposure to the antibodies for another month. There is at present no substance which may be added to the blood to neutralize the Rh antibodies.

The principles involved in the treatment of the infant are: to lessen the toxicity of the blood, to retard the activity of antibodies which have come from the mother's serum, and to replenish the blood with erythrocytes that are functionally potent and normally resistant to lysis, until the blood-making tissues can produce such cells in adequate number.

These objectives are best met, we believe, by repeated transfusions of small quantities of fresh blood from Group O, Rh negative young women, who have never been pregnant nor ever received transfusions of Rh

positive blood;—Group O, because the A and B properties may not be fully developed at birth; fresh blood, for the reason that the survival time of the transfused erythrocytes will be longer than from stored blood; Rh negative blood, on account of the insusceptibility of the red cells to hemolysis; and the blood of a young woman, since Diamond has shown that it has an inherent life-saving quality for these infants that blood from male donors does not possess.

Many good authorities recommend the method of exchange transfusion, in which, alternately, small amounts of the donor's blood are injected, by way of the umbilical or other vein, and similar portions of the baby's blood are withdrawn until an equivalent amount of donated blood has been substituted for the whole volume originally present in the infant's circulation.

Although we can say nothing in disparagement of the method, we do not attempt it ourselves; nor do we believe that it should be undertaken by any others than an especially trained group, who are accustomed to working together to the completion of these particular tasks, and who have ample facilities, including an adequate supply of appropriate blood. Babies who are suffering from hemolytic disease cannot always safely be transported to distant centers for treatment. Moreover, we are not convinced that the method is superior to the less drastic one of giving repeated small transfusions. Relying upon the simpler plan, my colleagues at the Archbold Memorial Hospital have succeeded in the treatment recently of two infants: one with marked hemolytic anemia, and the other with icterus gravis.

Conclusion

The facts and opinions which we have tried to summarize convince us that knowledge of the Rh factor is requisite to efficient, present-day medical practice. The physician who has the care of prospective or pos-

sible mothers, at any time from their infancy throughout the childbearing years, will need constantly to keep the implications of the factor in mind. By so doing, and by applying the principles that have become established for the management of cases of Rh sensitization, he may be able to allay the apprehensions of some of his patients, to safeguard others through the course of maternity, and perhaps to secure to an unborn child the heritage of life and health.

REFERENCES

- References to important monographs may be found in:
1. Potter, E.: Rh, Chicago, The Year Book Publishers, Inc., 1947.
 2. Wiener, A.: Blood Groups and Transfusion, ed. 3, Springfield, Charles C. Thomas, 1943.
 3. Strumia, M. M., and McGraw, J. J.: Blood and Plasma Transfusions, Philadelphia, F. A. Davis Company, 1949.

DISCUSSIONS

DR. MAX MASS (Macon): Nipple discharge has generally not been accorded the attention it deserves. The simple recognition that many discharges are physiologic or at least engendered by remote causes, such as endocrine factors, trauma, infection, menstrual and menopausal, and involutional changes should be kept in mind. It is well to remember that a simple milky discharge, known as galactorrhea, may last for several years after weaning. It may appear grossly serous or thick and creamy. This discharge tends to persist longer in multipara and in older women. In about 20 per cent of women after menopause, a milky secretion may be noted and quite often in nonparous women. Microscopically, such discharge consists of fat droplets, colostrum bodies, desquamated epithelium and leukocytes. A serous or cloudy discharge may be found in cases of deficient ovarian function. Sometimes the secretion is a thick inspissated and sometimes greenish material, due to *Bacillus Pyocyaneus*. A wine-colored discharge does not necessarily contain blood. A greenish discharge sometimes occurs bilaterally in young women who have borne children. This is generally a stagnant secretion. However, it must be borne in mind that all secretions, of whatever color or consistency, may be associated with carcinoma. For this reason, all nipple discharges should be examined microscopically for cancer cells.

The interpretation of these smears requires a thorough knowledge of the normal cytology, including the physiologic variations, mazoplasia and involution, and a rather thorough familiarity with cytologic smears, stained by the Papanicolaou technic. The distinction of carcinoma from the simple papillomas and the ductal proliferative alterations is rather difficult. However, the detection of pleomorphism, anaplasia and other atypical cytology can prove of great assistance to the clinician.

In cases where no mass is palpable and transillumination renders no positive findings, a very small discharge may reveal exfoliated neoplastic cells, most often originating from a ductal papilloma. Frank mammary carcinomas do not generally bleed.

I believe that more careful attention to nipple discharges and careful cytologic studies of such discharges may permit the recognition of an early subclinical lesion.

I have had ample occasion to follow the work of Dr. Nieburgs in the literature and by personal correspondence and consultation, and I believe that his studies on the subclinical preinvasive cytology is

unique and highly pertinent to the problem of early diagnosis of unsuspected cancer of the cervix.

I was glad to note that Dr. Nieburgs emphasized the fact that lack of biopsy proof, in cases where a positive smear has been reported, does not necessarily indicate a false positive. This has been strikingly demonstrated in at least two of my own cases, in which repeated biopsies were negative but careful block sections of the removed uterus demonstrated a small area of preinvasive carcinoma. It must also appear obvious that the smear study cannot tell us whether or not invasion has already occurred. I have been disturbed by the thought that once a positive class 3 or 4 diagnosis has been made from the smear, no matter how many subsequent smears are made, for biopsies for that matter, proving in all cases negative except for the one smear, leaves one in the position of being compelled to do something to assure the patient that she does not have carcinoma. I have followed the rule that, in doubtful cases, two subsequent negative smears and a negative endocervical curettage justifies an assurance to the patient that cancer does not exist. Of course, I am not speaking of cancer of the corpus. In such instances an endometrial scraping is also submitted.

It has been of considerable interest to me to observe that men in the very forefront of this work on exfoliative cytology are unanimous in urging great caution in the clinical interpretation of the cytologist's findings. All are agreed that biopsies are necessary for the confirmation of a positive smear. To personally object to the use of the word in screening films cases where a larger series are examined. The word implies that those who pass through the screen are safe. It is actually a case-finding procedure reaching out, as it were, in the hope of detecting cases of cancer of the cervix before it has reached clinical proportions. I wish to caution those making endocervical preparation that an experience indicates that a most new do not obtain their specimen deep enough in the cervical canal. The distance between the junction is sometimes much deeper than is apparent from external observation. The cytologist must reject all smears that do not contain endocervical cells in sufficient quantity for diagnosis.

I want to congratulate Dr. Nieburgs on the prodigious amount of carefully controlled work he has done under the guidance of our great teacher, Dr. Edgar Phipps. His special contribution to the detection of the preinvasive cell in the endocervical smear is an outstanding contribution to the detection of preclinical cancer of the cervix.

DR. ALLEN H. BENCE (Atlanta): It is impossible for one who has had any particularly early experience in a pathology technique to sit still in an audience and not call attention to the wonderful work which Dr. Nieburgs and his associates have been doing.

In particular something that has not been brought out. See this scientific exhibit. It is beautiful. The scientific exhibits here are well worth our trip to Macdonald's.

DR. NICHOLAS C. HARRISON (Savannah): I would like to make just one comment on Dr. Green's paper on endometritis. Last fall I heard Dr. Telinde read a paper on endometritis in which he called it "the scourge of the private patient". He felt that late marriages of private patients had something to do with the incidence of endometritis, and he advised doctors to urge their

patients to marry early.

When he finished, Joe Meggs of Boston arose and said the endometritis showed that the incidence of carcinoma of the cervix was much greater in women who married early.

You can thus take your choice whether you would rather advise a patient to marry late and have endometritis or to marry early and increase the incidence of carcinoma of the cervix.

DR. JOSEPH BLUMBERG (Augusta): Being a pathologist, I would like to say a word in regard to Dr. Nieburgs' paper, because cytology is something that will put a burden upon the pathologist.

About four years ago I attended a meeting of pathologists in Chicago, at which approximately 1,000 were present from all parts of the country. At that time cytology was brought to the floor for discussion, and most of the members were not in favor of this burden being handed to them. As one man brought out, if every pathologist in the United States worked twenty-four hours a day on nothing but cytology, at the end of the year approximately one-third of the women in the United States could be examined.

It was very obvious that the pathologists could not take on another specialty, although the public was beginning to demand it through the lay press.

Dr. Nieburgs' paper has now been found possible (as shown by Dr. Nieburgs) to develop people who can screen the normal from the pathologic, and thereby eliminate 80 or 90 percent of the smears so that the pathologist or the cytologist has at least 10 percent of the other 10 percent.

Another thing that was brought out was that pathologists frequently argue and fuss about whether this or that is malignant, or benign, or borderline cases when there are some dozens of cells on a slide. When you reduce it to a single cell and start to put it into a Class 2, 3 or 4, you run into another problem.

Dr. Nieburgs' paper was the other day in the mail I received a letter, as perhaps some of you did also, stating that courses were being given to doctors at certain centers in the United States once or twice in duration, on pathology.

Having worked with cytology for four years, although I do not devote my entire time to it, I feel that I am totally inadequate even at this time to pass upon certain types of cells, and therefore have had to use men like Dr. Nieburgs as a consultant in equivocal slides.

It isn't as simple as it sounds. You can't just look at a slide and give the answer. Dr. Ayers, from Montreal, made a movie in which he shows the slide being handed to him, he looks at it and says, "The patient has cancer." He takes up the next slide, looks at it and says, "The patient does not have cancer." That is obviously erroneous information.

Cytology is a specialty. It requires a lot of training, a lot of information, and there are very few people who have that information as much as Dr. Nieburgs, because he spends the majority of his time on the subject.

DR. B. T. BEASLEY (Atlanta): (Slide) Frequency of any discharge, according to Garland, is 46 per cent in all women. According to Greenbaum it is 70 per cent. Gershicker quotes 3 per cent. In our series we found 90 per cent frequency.

(Slide) The type of nipple discharge was physiologic. There are three kinds—mucoid or serous secretion, found in the young breasts, and the thick, creamy or serous secretion found in the older type of woman who has borne children and the colostrum or milk type found in the breasts of pregnant and lactating women.

(Slide) The pathologic path of discharge: There are three that found in the benign lesions, in intraductal papilloma, fibroadenoma cysts, and trauma. Malignant lesions: Carcinoma, Paget's disease, and

sarcoma. Inflammatory lesions, found in mastitis, infected ducts, syphilis, and tuberculosis.

(Slide) This is a slide of plasma cell mastitis. This is a rather rare condition. It is a rather controversial question as to what plasma cell mastitis is. It exists, and this slide was taken from the secretion of a breast which was bloody appearing, but it was not blood—it was that dark color that looked like blood. We found the massed cells in the secretion, and we designate that under the head of plasma cell mastitis.

DR. EDGAR HILL GREENE (Atlanta): Mr. Chairman, the only thing I would like to add is that I appreciate the discussion by Dr. Richardson.

It has been advocated by some that probably early marriage would prevent the development of endometriosis. I am also aware of the fact that Dr. Meggs pointed out the early incidence of carcinoma of the cervix in married women who probably began bearing children early.

I feel that regardless of the findings of these eminent men, I want to take the stand in favor of early marriages and the nursing of babies, as advocated by Dr. Beasley, in order to prevent those aberrant and peculiar discharges that he talks so much about.

Whether they run the risk of having carcinoma of the cervix or not, I believe the women of our country would be so stimulated as a rule by the stimulation from the pituitary and the other gonadal glands that they would give little thought to carcinoma of the cervix until they arrive at that age when it becomes necessary to make certain examinations—and then catch them early and give them all necessary treatment.

DR. HERBERT NIEBURGS (Augusta): I have nothing to add except that I want to thank the discussers for their presentations. I agree entirely with Dr. Bunce regarding screening. His term of "case-finding procedures" is a very good one. A patient who has a negative smear cannot be called free of cancer unless smears are repeated over a certain period of time, periodically, at least once a year.

DR. HELEN BELLHOUSE (Atlanta): I feel privileged to make comments on a paper which I think deserves a great deal of thought.

If any of you have done any amount of reading on the Rh factor, you cannot but pay tribute to Dr. Saye's creating order out of chaos. His paper was very simply and clearly done, and every day this matter of the Rh factor is becoming more and more important.

No mother in Georgia should go through pregnancy without being able to have an Rh factor determination. It is a case of teamwork between the laboratory and the physician in the prevention of difficulties and problems. Probably a great many of us heard Dr. Diamond when he spoke in Atlanta. He has definitely shown that kernicterus is a preventable disease. That is the public health point of view.

I am interested in preventable diseases from the public health point of view. Kernicterus has not been shown to occur before forty-eight hours. If a baby is transfused adequately before forty-eight hours, kernicterus is a preventable disease, and I think it is well to realize that transportation has improved considerably in the last thirty years, so much so that I doubt if there is a baby born in Georgia now who cannot be taken to a center where replacement transfusion can be done.

Just because you are not right in the middle of scientific activity, don't feel hopeless. Make an effort, and get the baby to a place where something can be done for it.

The Medical Association of Georgia will hold its next annual session at the Bon Air Hotel Augusta, April 17-20, 1951.

EDWARD CAMPBELL DAVIS, M.D.

(1867-1931)

ISABELLA ARNOLD BUNCE

Atlanta

In the year 1867 America, the land of the free and the home of the brave, had much to occupy her time. One of her many problems was the badly crippled South left so from the War Between the States. Notwithstanding the sad condition of the fallen South, the Reconstruction Act was passed over the veto of President Andrew Johnson who had always attempted to befriend her.

It was into this perilous period of carpet-baggers, scalawags and freed slaves that Edward Campbell Davis was born on the 11th day of October, 1867, in Albany, Georgia. His parents were Ella Catherine Winkler Davis and Dr. William Lewis Gardner Davis. Thus it came about that his heritage was the blend of the blood of England, Scotland and Wales.

Campbell, as his family called him, had dark brown hair and deep blue eyes that were enhanced by a direct straightforward gaze. In family sequence, he was next to the youngest of eight children; therefore, he had an opportunity to profit by the experiences and companionship of the older ones. In consequence, he led the happy life most small boys are privileged to experience.

Unfortunately, his father, who had always maintained a heavy practice, contracted pneumonia and died when Campbell was five years old. His mother shouldered the responsibility of the family and the large plantation on which they lived. The trades people of Albany never hesitated to lend her money or furnish her with supplies, for well they knew that when her crops came in, they would have their money. Therefore, Mrs. Davis had the respect and admiration of her community.

Campbell received his fundamentals of education in Albany. Then he entered the University of Georgia where he received his A.B. degree in 1888.

Besides having a father who was a doctor, Campbell also had a brother, W. L., who practiced in Albany. The medical strain in the Davis issue was and is a rather dominant one. Therefore, Campbell decided to study medicine. He then entered the University of Louisville in Kentucky for that purpose. It was there he graduated in medicine in '92.

From then on Edward Campbell Davis was professionally known as Dr. E. C. Davis. He had always liked Atlanta, so there, on a summer's day, he came to pursue the practice of surgery. Without delay, Dr. Davis entered into an association with Dr. C. D. Hurt.

While Dr. Davis was laying the foundation

of his practice, he took some time out to fulfill his social engagements. It was due to this fact that a very lovely girl, with hair of yellow gold, eyes the color of the sea, fair of skin and beautifully curved, met her fortune. She was none other than Maria Carter, a direct descendant of the famous King Carter of colonial days in Virginia. Strange as it may seem, tho' Maria lived on the same street as Dr. Davis in Albany, they had never met.

Maria was educated at Lucy Cobb and among the many friends she made there was Carolyn Sisson, of Wisteria Hall, Kirkwood. These girls became good friends and continued to keep up their friendship after leaving college. Carolyn wrote to Maria of a young surgeon, Dr. E. C. Davis, of Albany, whom she would like for her to meet. So, with the aid of Carolyn and Wisteria Hall, they met.

The setting for the wooing of Maria Carter by Dr. E. C. Davis was ideal. Hence, it was in a mellow month, aglow with the fiery flames of fall subdued only by the light of a harvest moon, that Venus fanned a smouldering ember on the altar of love for them. From then on there arose between them a comfortable correspondence, but, due to Maria's indecision, it dwindled and disappeared.

While Maria remained thus in maiden meditation, Dr. Davis was asked to join Governor Atkinson's party on a good will trip to Mexico. Although he was delayed and missed the Governor's train, he managed to catch up with the party in Louisiana and made a memorable trip of it. In this manner and in other pursuits, he was able to bide his time as he waited around for Maria.

Destiny now played her hand for this young couple. The Maine, while lying languidly in the waters of Havana harbor, was sunk. So, then, there was the Maine for the Americans to remember. Of course, war was declared. Governor Atkinson immediately appointed Dr. Davis as Captain of the Second Georgia Volunteer Infantry in 1898.

On his way to serve his country in the Spanish-American War, Captain Davis was sent by way of his home, Albany, to his station in Florida. Here, Maria, with many others of his town's people, was there to wish him God's speed. Then it was that the sight of dashing Dr. Davis in the decorative uniform of his country began to make up Maria's mind for her and win her heart. Therefore, their discontinued correspondence was resumed in earnest. Dr. Davis often laughingly said he had to go to Cuba to get her for his wife.

While he was stationed near Tampa, an epidemic of typhoid fever raged among his soldiers. He immediately began the organization of a hospital to give adequate care to the sick. He worked tirelessly day and night only taking a few hours of rest and these limited by

the clock or the call of his orderly. During the peak of this crisis, General O'Reilly sent word for him to report to his office for some routine matter. Dr. Davis sent the general a message stating he would come only if a doctor was sent to relieve him. There was marked apprehension by the staff that he might be severely reprimanded or even court martialed. However, he was not. Dr. Davis was a firm believer in doing his duty no matter what the cost to himself. A promotion to Major was given Captain Davis for his outstanding work during this time.

A grateful brother of one of the doctor's patients presented him with a United States flag. This flag is now a Davis family treasure.

Major Davis served his country from the spring until fall; he was then mustered out at Piedmont Park.

Back again he went to his Atlanta practice now working with Dr. J. B. S. Holmes at his sanatorium on Cain Street.

In June, the month of brides and roses, in the year 1899, Dr. E. C. Davis took Maria Carter for his wife. After their honeymoon they lived for a short time at the Sanatorium. From there, they moved into their first home on Pine Street. With these two there was such a perfect surrender to their love that the beautiful words of Edgar Allen Poe's poem "Annabel Lee" are comparable, thus quoting "But we loved with a love that was more than love—I and my Annabel Lee".

Dr. Davis' practice continued to grow rapidly. After a short period of being out for himself, Dr. L. C. Fischer became associated with him. Their offices were located in the English American Building at Peachtree and Broad Streets. There it was that these two young surgeons had the vision of their great hospital to serve the sick as a haven of help, health, hope and happiness. Drs. Davis and Fischer opened their hospital on Crew Street in 1908. From this cornerstone, Davis-Fischer Sanatorium arose. A few years later they moved their hospital to Linden Street and the growth of Davis-Fischer Sanatorium was miraculous. Their hospital, still located on the same site in this year of 1949, occupies almost an entire city block in the heart of Atlanta. However, it is now known as the Crawford W. Long Memorial Hospital.

The skill of Dr. Davis was such that even his family would have no other doctor to operate upon them. Mrs. Davis' sister had had an attack of appendicitis while on a stay in Paris but refused surgical aid so as to have him remove her appendix. During the same week of her operation, he also operated on his own sister.

Dr. E. C. Davis always kept pace with the progress of his profession. He bought the first Kimble tube used here for direct transfusion. It was immediately put into use where a life was despaired of, resulting in the recovery of

the patient. He also bought and installed the first freezing microtome used here. Henceforth, fresh tissue sections could immediately be prepared and diagnosed on all cases of suspected cancer, to determine the extent of the surgery needed while the patient was still on the operating table.

Furthermore, he was one of the earliest believers in and users of the aseptic and antiseptic technic in surgery. He learned to use rubber gloves with dexterity while most surgeons of those days felt clumsy and deprived of the sense of feeling during an operation when wearing them, on account of their thickness.

His greatest feats were accomplished by his skill and originality in gynecologic and abdominal surgery.

Dr. Davis was always prompt in the operating room. He began his surgery at or before 8 o'clock each morning. He could easily conclude five or more operations before noon. In addition, he would have numerous emergencies carried in day or night from a radius of 300 miles or more. It was not uncommon for him to operate on a patient brought from a great distance with an acute suppurative appendix.

During the day Dr. Davis would take time out only for a short lunch. Then, back to work again. He was constantly surrounded by doctors, interns and nurses as he made his rounds where he not infrequently had 20 or more patients in the hospital. Besides being one of the South's most distinguished surgeons, he was one of the best loved of his time. To the young doctors he meant much for not only was he their surgical hero, but friend as well.

Next to surgery his greatest medical love was obstetrics. This he practiced with the strictest adherence to cleanliness and antiseptic technic in both the home and delivery room. He was almost uncanny in recognizing the signs of eclampsia and other toxemias of pregnancy. The expectant mother under his care had constant supervision administered through observation, examinations and laboratory checks on both urine and blood at regular intervals.

Besides Dr. Davis' practice he held the position of Professor of Obstetrics and Gynecology for 20 years at the Atlanta School of Medicine, which is now a part of Emory University.

He was nearly always in attendance at the medical meetings held by the county, state and the national societies. Being a master of precision, he wrote many scientific papers and was a much sought after speaker at the medical meetings.

In 1914, Dr. Davis took part in a Clinical Congress held in London. While he was there World War I broke out in Europe. He had to return home by steerage and was landed at Quebec. Little then did he know that this same war would return him to Europe with the silver leaf of a Lieutenant-Colonel on his shoulder.

Dr. Davis was quite a family man. He and Mrs. Davis had eight children, namely, Shelley C., Catherine, Page, E. C., Jr., Ria, Robert Carter, Sarah and Teddy. Never was he happier than when his children were clustered around him. Another pleasure enjoyed by the doctor and his children were their expeditions to Kamp-er's where he bought them just anything they wanted.

As an aid to Dr. and Mrs. Davis, their nursery was adequately staffed by a competent colored woman, who was affectionately called "Nursie" by her charges.

Dr. Davis' whimsical sense of humor was shown by the names of his three horses of his horse and buggy days. They were Faith, Hope and Charity. Long after their master was using a horseless carriage in his practice, these horses remained in the Davis stables.

At the Davis home there was always a member of the family or a friend staying with them. Once two friends of theirs, a man and his wife, were in need of housing. The husband asked Dr. Davis if they could stay for a while with them. Dr. Davis told him to ask Mrs. Davis. He did. They stayed five years. There was only once in the entire married life of Dr. and Mrs. Davis when they were left alone for a second honeymoon without family, friends, or the eight children.

Dr. Davis enjoyed vacationing at Pass-a-Grille, Florida. He and Mrs. Davis would take the small children with them and leave the others at home. During these periods of relaxation Dr. Davis asked no more of any one of them than to catch a tarpon—his favorite sport.

At the outbreak of World War I, Dr. Davis was asked by the American Red Cross to organize the Emory Unit. He was chosen on account of his fine record in the Spanish-American War. He, of course, took on the job and the Emory Unit was months in the making. He was also placed on the examining board. Dr. Davis was commissioned a Lieutenant-Colonel of the Unit, and made medical director of the unit when it was named Base Hospital 43 in its overseas duty.

As a result of Colonel Davis' capable and courageous discharge of his duties in the theater of action, he was awarded a certificate of merit by General John J. Pershing, decorated by King Alexander of Greece, and given membership in the Knights of the Ancient Order of Our Saviour.

On account of Colonel Davis' strenuous work in the organization of the Unit and his activity overseas, he became ill. He returned home and his ship reached Newport News on November 11, 1918, the day of the signing of the Armistice.

After a brief interlude, Dr. Davis resumed his practice. He was later joined by his son, Dr. Shelley C. Davis, who had been thoroughly trained in surgery at home and abroad.

(Continued on page 307)

THE JOURNAL

OF THE
MEDICAL ASSOCIATION OF GEORGIA

EDGAR D. SHANKS, M.D., Editor
478 Peachtree Street, N. E., Atlanta, Ga.

JULY, 1950

A. M. A. PRESIDENT SPEAKS

San Francisco, June 27.—In a hard-hitting inaugural address here tonight, broadcast Coast-to-Coast over two radio networks (ABC and Mutual), Dr. Elmer L. Henderson of Louisville, Kentucky, new president of the American Medical Association, charged that "the administrative arm of our Government has failed us in this generation."

The fighting doctor from Kentucky, who took his oath of office at an open meeting of the A.M.A. House of Delegates here, and whose message was heard by millions of the American people, flatly accused "little men with a lust for power" in the executive branch of the Government of seeking to make America "a Socialist State in the pathetic pattern of the socially and economically-bankrupt Nations of Europe."

A Sick Government

The Administration in Washington, asserted Dr. Henderson, is "sick with intellectual dishonesty, with avarice, with moral laxity and with reckless excesses."

That condition must be changed, he declared, "if we are to survive as a strong, free people"—and he called upon all of the American people to share the responsibility and to uphold the Nation's ideals of freedom.

To the 144,500 members of A.M.A., who had received special invitations to hear their new president's address, he said:

Medicine—the Target of Cynical Men

"Tonight I call upon every doctor in the United States, no matter how heavy the burdens of his practice may be, to dedicate himself, not only to the protection of the people's physical health, but also to the protection of our American way of life, which is the foundation of our economic health and our political freedom."

Continued the new A.M.A. president:

"American medicine has become the blazing focal point in a fundamental struggle which may determine whether America remains free, or whether we are to become a Socialist State, under the yoke of a Government bureaucracy dominated by selfish, cynical men who believe the American people are no longer competent to care for themselves.

Under Socialism, Liberty Dies!

"These men of little faith in the American people propose to place all our people, doctors and patients alike, under a shabby, Government-

dictated medical system which they call Compulsory Health Insurance. But it is not just socialized medicine which they seek. Their real objective is to gain control over all fields of human endeavor—and to strip the American people of self-determination and self-Government.

"There is only one essential difference between Socialism and Communism. Under State Socialism human liberty and human dignity die a little more slowly, but they die just as surely!"

Then Dr. Henderson, declaring that "American medicine has led the world in medical advances, and has helped to make this the healthiest, strongest Nation on the face of the globe," blasted the critics of medicine with this significant statement:

"It is not American medicine which has failed to measure up to its obligations.

"It is not American business nor American agriculture which has failed—nor the fine, loyal working people of America who have failed.

"It is the administrative arm of our Government in Washington which has failed us in this generation!"

Press Praised for Leadership

Stressing the fact that many already recognize the dangerous trend toward concentration of power in Washington, Dr. Henderson declared:

"If it were not for the leadership of the American press, in defending our fundamental liberties, American medicine, even now, might be socialized—and under the heel of political dictation.

"The newspapers of America, with few exceptions, have taken a strong stand, not only against socialized medicine, but against all forms of State Socialism in this country—and the doctors of America are proud to take their stand beside the fighting editors of America in the battle to save our freedom and the system of individual initiative which maintains it."

The Miracle of Medical Progress

Reviewing the great achievements of American medicine at the halfway mark of the 20th Century—with 19 years added to the life span during the past five decades, with many dreaded diseases conquered, which were leading killers at the turn of the century, and with the maternal death rate in this country now lower than in any other Nation—the A.M.A. president commented:

"The story of never-ending medical progress in this country is not just a story of so-called miracle drugs and miracle discoveries. The real miracle of American medical progress is the miracle of America itself—the motivating power of the American spirit, of free men, unshackled, with freedom to think, to create, to cross new frontiers.

"This is the spirit, and these are the very methods, which Government-domination of medical practice would destroy."

Voluntary Way Is American Way

Declaring that the Nation's medical care problems can be resolved "without compulsory payroll taxes and without political pressure," Dr. Henderson pointed out that approximately half the population of the country already has enrolled in Voluntary Health Insurance plans "to take the economic shock out of illness."

Said Dr. Henderson:

"Within the next three years, in the opinion of leading medical economists, 90 million persons will be enrolled in the Voluntary prepaid medical plans—and when that number has been reached, the problem will have been largely resolved."

Dr. Henderson concluded his address by thanking the American people for coming to medicine's defense when it was brought under attack, and reported that more than 10,000 National, State and local organizations, with many millions of members, have taken positive action against Compulsory Health Insurance.

CIVIL DEFENSE A CIVILIAN RESPONSIBILITY

Opinion has been expressed in some instances that civil defense preparations are entirely the responsibility of the military. This was a cause for concern at a recent meeting of the Council on National Emergency Medical Service. Representatives of the Department of Defense and the National Security Resources Board emphasized that the primary responsibility for civilian defense must be assumed by civil government, that in time of war the Armed Forces must be free to concentrate on their primary missions of repelling attack and carrying the war to the enemy. Since civilians must perform the necessary civil defense functions, they should be responsible, at all levels of government, for the required planning and preparations. Effective community action during a wartime disaster will depend largely on this peacetime development of a sense of community responsibility for self-preservation.

Concern was also expressed at the lack of general realization that civil defense preparations must be undertaken by not only the metropolitan but the less populated areas of the nation. Maine not only has enacted civil defense legislation that would enable it to furnish assistance to other states if necessary but also has formulated plans whereby supplies and personnel—including physicians—may be dispatched to areas where resources have been overwhelmed by disaster. The fact that 32 state and territorial medical societies, after notification that this meeting of the Council on National Emergency Medical Service would be concerned solely with the medical aspects of civil defense, sent representatives indicates an awareness of the urgent need for immediate initiation of

preparations for civilian protection. This answers charges from those who maintain that the medical profession has lost sight of its responsibilities in civil defense fields.

An impressive aspect of this meeting boding well for the future, since it embodies one of the cardinal principles of civil defense, was the obviously sincere desire of those present, whether they represented state medical societies, allied professional associations or agencies of federal or state governments, to share knowledge and experiences in what was realized to be a common task—self preservation on a nationwide scale. As a result, especially of the recounted experiences of the medical societies of the Territory of Hawaii, the District of Columbia and the states of Georgia and Maine, it was possible to formulate definite suggestions which would assist state medical societies in planning and organizing similar programs. In the same manner, plans were developed whereby state societies may soon aid their individual members in the acquisition of factual knowledge concerning the newer warfare agents.

The representatives of state medical societies that have organized civil defense programs stressed the absolute necessity of certain prerequisites to such programs and recommended for immediate action: The formation of emergency medical service committees by state medical societies that have not yet done so; urging by the medical profession, through state medical societies, of the governors of those states not possessing adequate civil defense enabling legislation to recognize the importance of such legislation; urging governors to appoint state directors of civil defense, to whom should be delegated the necessary authority and responsibilities, and requesting governors to appoint health services civil defense advisory councils to the civil defense directors, since intelligent planning is impossible without competent medical and allied professional advice and guidance. Such programs should go far in the recognition and utilization of the responsibilities and capabilities of the medical profession in times of emergency.—*Editorial The Journal of the American Medical Association, June 10, 1950.*

EDITOR'S NOTE: Dr. Edgar Dunstan, 478 Peachtree St., N. E., Atlanta, is chairman of the Committee on Medical Civilian Defense of the Medical Association of Georgia. Other members are: Drs. Wm. M. Bartlett, Chas. E. Dowman, Robert W. Candler and Jos. Skobba, all of Atlanta. Dr. Dunstan attended and participated in the A. M. A. conference mentioned in the foregoing editorial.

FIND MENTAL DEFICIENCY MORE LIKELY IN CHILDREN BORN TO MOTHERS OVER 40

Any woman who bears a child after the age of 40 runs a statistical chance of about 1 to 6 per cent of having a child with mongolism, a congenital mental deficiency.

This is brought out in a report by Dr. J. A. Book and S. C. Reed, Ph.D., of the University of Minnesota, Minneapolis, which appears in the June 24 *Journal of the American Medical Association*.

Children with this severe condition commonly are called idiots. Mongoloid babies are recognized by their marked liveliness, flattened skull and oblique eyes.

The frequency of mongolism in the general population is estimated to be between 1 out of 500 and 1 out of 1,500, according to the report.

Risk of having a mongoloid child also increases after a mother has borne one baby with the deficiency, the researchers found.

"A woman who has borne a mongoloid child runs a statistical chance of about 4 per cent of having the next pregnancy result in the birth of another mongoloid child," they say, adding:

"This implies a 40 times greater risk than the average at all ages."

AUREOMYCIN REDUCES CHILDBIRTH INFECTION POSSIBILITIES

Aureomycin is effective in lowering the possibilities of infection following childbirth, according to a report in the June 10 *Journal of the American Medical Association*.

A study on the use of the antibiotic in obstetric patients is presented by Dr. Joseph A. Guilbeau, Jr., Dr. Emanuel B. Schoenbach, Isabelle G. Schaub, A.B., and Doris V. Latham, A.B., of the Johns Hopkins School of Medicine and Johns Hopkins Hospital, Baltimore.

The normal uterus after birth contains a wide variety of bacteria which is potentially disease producing. Such infection may result in irreparable damage which can jeopardize future childbearing, the report points out.

Aureomycin hydrochloride was administered to 109 patients before delivery. Only 13 (11.9 per cent) showed positive cultures two to three days after giving birth. In a control series of 24 patients who had uncomplicated, normal deliveries, positive cultures were reported in 18 (75 per cent) cases.

The researchers also treated a number of acute childbirth infections during the study. They report:

"Aureomycin proved effective in various obstetric infections. Patients with acute and chronic infections of the urinary tract treated during pregnancy responded satisfactorily to therapy, although several relapsed when treatment was discontinued.

"Aureomycin is a desirable chemotherapeutic agent because it is effective after oral administration, it possesses a wide range of antibacterial activity and it is unassociated with serious toxic manifestations."

The report also points out that the antibiotic has the ability to reach the infant by way of the maternal blood stream in high therapeutic

concentration. This, they say, is a desirable property.

ONE-DAY AUREOMYCIN TREATMENT FOR GONORRHEA REPORTED

A 98 per cent cure rate in gonorrhea following administration of a one-day treatment with aureomycin, a newer antibiotic drug, is reported by an Augusta (Ga.) research group.

"A series of 100 unselected patients with gonorrhea was arbitrarily divided into two groups of 50 patients each," Drs. Calvin H. Chen and Robert B. Greenblatt and Robert B. Dienst, Ph.D., of the University of Georgia School of Medicine say in the current June 24 *Journal of the American Medical Association*.

"Group A was given aureomycin orally three times daily for two days and group B was given the same daily dose for one day. The results obtained from these two groups were identical. There was one failure in each group. Thus, the percentage of cure was 98 in each group.

"Toxic reactions were few and not serious. In several patients, the disease, which had failed to respond to penicillin and other medication, yielded to aureomycin treatment.

"It is apparent that orally administered aureomycin in the doses employed in this study is at least as effective as one injection of penicillin against gonorrheal infections."

Evaluation of the effect of aureomycin treatment was based on results of a physical examination given a week after treatment was begun. Duration of the disease varied from one day to two months. However, duration of the disease did not seem to have any influence on the speed of recovery, the article points out.

Of the entire group of patients, 83 were men and 17 were women. In 10 of these patients the condition had failed to respond to penicillin, chloramphenicol or sulfa drugs.

WHERE ARE OUR LARGE FAMILIES?

Large families are no longer part of our social pattern, and they are continuing to lose in popularity. The rate at which births of seventh and higher order occur, has dropped nearly 60 per cent in the past three decades. Even during the recent war and postwar period, when rates for the low orders of birth reached the highest levels in at least a third of a century, the rates for the higher orders continued their downward trend.

Nevertheless, large families even now are not altogether out of the picture. Somewhat more than 164,000 of the children born in the United States in 1947 were of the seventh or higher order. While this is only about 5 per cent of all births, the number is large enough to merit attention. The proportion of births in these higher orders varies considerably with the region of the country and serves as an index of the geographic pattern of our large families. The per

PERCENT DISTRIBUTION OF BIRTHS, BY ORDER OF BIRTH, COLOR, AND GEOGRAPHIC AREA
UNITED STATES, 1947

AREA	WHITE					COLORED				
	All Orders of Birth	1st-3rd	4th-6th	7th-9th	10th & Over	All Orders of Birth	1st-3rd	4th-6th	7th-9th	10th & Over
UNITED STATES*.....	100.0	84.2	12.2	2.7	0.9	100.0	66.1	21.4	8.5	4.0
New England*.....	100.0	85.9	11.3	2.0	0.8	100.0	78.0	15.1	5.1	1.8
Maine.....	100.0	80.6	14.4	3.4	1.6	100.0	75.7	18.9	2.7	2.7
New Hampshire.....	100.0	84.0	12.8	2.4	0.8	100.0	90.0	0	10.0	0
Vermont.....	100.0	79.7	15.5	3.6	1.2	100.0	60.0	40.0	0	0
Rhode Island.....	100.0	87.9	10.2	1.4	0.5	100.0	73.1	15.9	7.7	3.3
Connecticut.....	100.0	89.8	8.8	1.1	0.3	100.0	79.5	14.8	4.4	1.3
Middle Atlantic.....	100.0	88.1	9.6	1.7	0.6	100.0	78.8	15.6	4.2	1.4
New York.....	100.0	89.3	9.0	1.3	0.4	100.0	81.6	14.2	3.2	1.0
New Jersey.....	100.0	90.5	8.2	1.0	0.3	100.0	75.3	17.4	5.3	2.0
Pennsylvania.....	100.0	85.6	11.2	2.3	0.9	100.0	76.5	16.6	5.0	1.9
East North Central.....	100.0	85.1	12.0	2.2	0.7	100.0	75.3	17.8	5.2	1.7
Ohio.....	100.0	85.6	11.5	2.2	0.7	100.0	76.1	17.2	5.0	1.7
Indiana.....	100.0	83.5	12.7	2.7	1.1	100.0	72.3	18.2	6.4	3.1
Illinois.....	100.0	87.6	10.2	1.7	0.5	100.0	76.1	17.5	5.0	1.4
Michigan.....	100.0	84.0	12.9	2.3	0.8	100.0	74.5	18.9	4.9	1.7
Wisconsin.....	100.0	82.2	14.2	2.7	0.9	100.0	70.2	18.6	7.7	3.5
West North Central.....	100.0	82.6	13.6	2.8	1.0	100.0	69.1	20.4	7.2	3.3
Minnesota.....	100.0	81.5	14.8	2.8	0.9	100.0	66.1	21.1	9.8	3.0
Iowa.....	100.0	83.0	13.6	2.6	0.8	100.0	72.0	17.5	6.7	3.8
Missouri.....	100.0	83.5	12.3	3.1	1.1	100.0	70.5	19.5	6.7	3.3
North Dakota.....	100.0	76.7	17.1	4.4	1.8	100.0	50.2	30.6	13.4	5.8
South Dakota.....	100.0	79.3	16.2	3.2	1.3	100.0	57.1	27.7	10.6	4.6
Nebraska.....	100.0	83.6	13.2	2.4	0.8	100.0	71.6	20.2	6.4	1.8
Kansas.....	100.0	84.8	11.8	2.5	0.9	100.0	71.3	19.9	6.1	2.7
South Atlantic.....	100.0	81.2	13.5	3.9	1.4	100.0	62.1	24.2	9.8	4.9
Delaware.....	100.0	86.2	10.9	2.2	0.7	100.0	66.3	20.8	8.5	4.4
Maryland.....	100.0	86.0	11.0	2.3	0.7	100.0	68.2	20.7	7.7	3.4
Dist. of Columbia.....	100.0	93.3	6.0	0.6	0.1	100.0	79.7	15.1	4.0	1.2
Virginia.....	100.0	81.4	13.0	4.0	1.6	100.0	64.1	22.9	8.7	4.3
West Virginia.....	100.0	74.5	16.4	6.3	2.8	100.0	63.5	21.2	10.3	5.0
North Carolina.....	100.0	79.1	15.0	4.3	1.6	100.0	59.8	24.0	10.8	5.4
South Carolina.....	100.0	78.7	15.5	4.4	1.4	100.0	56.2	25.9	12.1	5.8
Georgia.....	100.0	81.1	13.8	3.8	1.3	100.0	60.2	23.5	10.6	5.7
Florida.....	100.0	84.9	11.6	2.7	0.8	100.0	63.5	23.6	8.8	4.1
East South Central.....	100.0	76.8	15.8	5.3	2.1	100.0	59.0	23.9	11.1	6.0
Kentucky.....	100.0	74.6	16.5	6.2	2.7	100.0	72.6	17.6	6.6	3.2
Tennessee.....	100.0	77.4	15.6	5.1	1.9	100.0	66.3	21.7	8.2	3.8
Alabama.....	100.0	77.6	15.7	4.9	1.8	100.0	57.8	24.5	11.6	6.1
Mississippi.....	100.0	79.0	15.1	4.4	1.5	100.0	55.2	25.0	12.6	7.2
West South Central.....	100.0	83.1	13.0	3.0	0.9	100.0	65.1	21.9	8.9	4.1
Arkansas.....	100.0	76.8	16.1	5.2	1.9	100.0	55.0	25.3	11.8	7.9
Louisiana.....	100.0	81.3	14.3	3.3	1.1	100.0	61.1	23.9	10.3	4.7
Oklahoma.....	100.0	81.6	13.5	3.7	1.2	100.0	66.5	20.5	9.0	4.0
Texas.....	100.0	85.5	11.7	2.3	0.5	100.0	75.4	17.8	5.4	1.4
Mountain States.....	100.0	79.7	15.1	3.7	1.5	100.0	61.5	23.9	10.7	3.9
Montana.....	100.0	83.0	14.0	2.2	0.8	100.0	56.0	25.9	12.9	5.2
Idaho.....	100.0	80.7	15.5	3.0	0.8	100.0	71.2	16.8	10.1	1.9
Wyoming.....	100.0	82.7	13.7	2.7	0.9	100.0	56.4	22.1	13.5	8.0
Colorado.....	100.0	82.6	12.5	3.4	1.5	100.0	77.3	16.0	4.9	1.8
New Mexico.....	100.0	70.2	18.3	7.7	3.8	100.0	56.5	26.1	12.3	5.1
Arizona.....	100.0	78.3	15.8	4.3	1.6	100.0	59.7	25.3	11.5	3.5
Utah.....	100.0	79.6	17.1	2.6	0.7	100.0	74.9	19.6	3.9	1.6
Nevada.....	100.0	86.2	12.2	1.3	0.3	100.0	62.6	25.5	8.8	3.1
Pacific.....	100.0	87.9	9.9	1.6	0.6	100.0	77.1	17.4	4.3	1.2
Washington.....	100.0	87.0	11.1	1.6	0.3	100.0	74.4	18.2	5.4	2.0
Oregon.....	100.0	86.4	11.5	1.6	0.5	100.0	74.9	16.5	5.7	2.9
California.....	100.0	88.3	9.5	1.6	0.6	100.0	77.4	17.4	4.1	1.1

*Excludes Massachusetts, which does not require reporting by birth order.

Source for basic data: *Vital Statistics of the United States*, 1947, Part II, tables 6A and 6B.

cent distribution of birth by order and color, for the individual States, is shown in the table on page 305.

Large families are most frequent in the South. The East South Central States rank first in this regard, births of seventh or higher order constituting 7.4 per cent of all births among white women in that area in 1947; births of 10th and higher order alone comprised 2.1 per cent of the total. The South Atlantic and the Mountain regions follow in sequence. At the other end of

the scale are the Middle Atlantic and Pacific States; in the last named, white births of seventh and higher order were only 2.2 per cent of all the births, and births of tenth and higher order merely 0.6 per cent of the total.

Interesting variations can be seen within regional groups. In general, large families are more common in the agricultural States than in the industrial areas. In New England, for example, the proportion of white children of seventh and higher order in Maine and Vermont was 3½

times that in Connecticut. Undoubtedly factors other than urban-rural differences play a part. Thus, large families are relatively $2\frac{1}{2}$ times as frequent in Pennsylvania as in the neighboring State of New Jersey. The highest proportion of white births of seventh and higher order occurred in New Mexico, where they constituted 11.5 per cent of the total. Yet in Nevada, which is also in the Mountain Region, the proportion was only 1.6 per cent.

Colored women, in general, bear larger families than do the white. In the country as a whole in 1947, births of seventh and higher order constituted 12.5 per cent of all births among colored mothers, but only 3.6 per cent of the total among the white; for tenth and higher orders, alone, the relative proportions were 4.0 and 0.9 per cent. Among the colored, as among the white, the largest families are found in the East South Central States, births of seventh and higher order accounting for 17.1 per cent of the births among the colored in that area. It is noteworthy that the difference between white and colored in the relative frequency of large families has been gradually widening in the past few decades.—*Statistical Bulletin*, Metropolitan Life Insurance Company, May 1950.

GOOD PUBLIC RELATIONS

The following tribute to a Georgia physician appeared in the *Atlanta Constitution* June 13, 1950. Written by Associate Editor Doris Lockerman of the *Constitution* staff, it not only portrays a life well lived but also tells of the fine relationships this physician experienced with his public. True, there are many physicians in Georgia and elsewhere whose lives and work parallel that of our beloved deceased brother, the subject of this sketch. It is this kind of living and this kind of work that build good public relations.

ACCT. DR. BUTLER:

PAID IN FULL

AUGUSTA—A fine old doctor died here last week, leaving his wife a stack of loving testimonial letters, his daughter enough philosophy to guide her for a lifetime, his brothers and sisters a reservoir of pride and memories, and an unnumbered list of friends the gift of a living father, mother or child, instead of an aging epitaph in the family burial ground.

In a way the career of Dr. James Harvey Butler may have been the story of many doctors who are called into their profession as if by a mystic sign, and who serve it without publicity or fanfare, with their whole souls.

Dr. Butler had done his share of probing the mysteries of life. He had been a leader in the treatment of diseases of the heart, and his original techniques in the treatment of pneumonia and tuberculosis had led many young men onward to a fuller understanding of these afflictions.

Somewhere along the line of his long practice, he had become familiar enough with the human body to understand its cycles and vagaries and to become a notable internist, and of late, his practice had become more and more general, with emphasis on his skill as a diagnostician.

For many years he had taught medicine to the senior

class of the School of Medicine at the University of Georgia, the school of his deepest affection, and students of his classes say they came under his influence when they needed his inspiration most.

These facts are matters of record.

The story behind them is far more revealing, its texture the rough, colorful, salty warp of a Southern farm boy who was somehow always master of his own fate.

At 18, Harvey Butler was a strong, fair-minded man, the youngest County Warden in Georgia, operating a firm hand in the administration of convict camps in Dooly County, where he had grown up on his father's farm near Lilly. Walter George of Vienna had been his lifelong neighbor and his friend.

Young Butler was, as they say, "uneducated," but he was quick and forthright and honest. From time to time his friends recall he had "spells" of wishing to become a doctor, and he saved his money carefully, working hard on the land, and holding the unruly reins of his job with human recalcitrants.

Finally, at 25, came the day of choice. Turning down an offer of partnership in a planing mill, Butler left the farm and headed for Augusta to enter the School of Medicine.

The day after he arrived there, a young Negro man showed up on the campus. "Ise gwine to be here from now on, Mr. Harvey," the man said succinctly and put down his little bundle of clothes. He was a convict, just released, and he had found his master. He never left him through lean years and rich. He was a chief mourner at the funeral services Saturday.

World War came just as Harvey Butler added a Dr. to his name, and he became a Major in the Army Medical Corps, coming back to begin practice at an age when other men had already built themselves thriving and renowned reputations.

From the first, his practice had an air of dedication. He worked day and night, answering calls anywhere. He prospered in reputation and in means.

Then, somewhere in his mid-forties, he married Miss Eleanor Keith, supervisor of nurses at the University Hospital, and they began a home.

Symholic of their capacity, they invited a sister, Anile Butler, to come to live with them. She, too, never left.

There was a daughter, Eleanor, whom they called Bootsie. They showered her with rocking horses, stuffed toys, a yardful of hunting dogs, a horse or two and every loving kindness a pair of parents could provide.

Bootsie learned to fish with her father, to ride with him, to climb trees, walk in the woods and to hunt with the dogs that obeyed her even as a child.

With a deep personal loss, her father let her go off to Brenau to school, and lest she grow homesick, he sent her horse, Major, to college with her.

Two years ago, relieved at last of the harried demands of wartime practice, Dr. Butler suffered a heart attack and his health forced an ever narrowing of his work. His strength was misered in every way by his wife, and his sister.

"If I can just live to see Bo graduate," he said often, "I will be happy."

Last Monday night, Bootsie was graduated from Brenau College, and her father was in the audience. He saw her in her cap and gown, receive her diploma, and they drove home together.

"Daughter," he said the next day, "I have given you everything I could. It has cost your Mother and me a great deal. Now you must give to others. You must never be selfish. What you have received was only given to you to be passed on. Never let a day pass that you do not do something kind and thoughtful for others."

The next day he went to his office as usual, and on his way home asked his wife to drive him to the

home of a patient who lay ill in an upstairs room.

She begged him not to climb the stairs, but he insisted. "I had given my word," he said, "and they expect me." He climbed the stairs.

Sometime that night, in the quiet of the old house on Milledge Road where there had been such peace and fulfillment, death came to Dooley County's young warden and Augusta's devoted doctor. His women folks found him sleeping when they came up with his morning cup of coffee.

Beside his bed there was a little packet of bills for small gifts and remembrances to needy people whom he had befriended anonymously. They had all been paid in full.

RECOMMENDS EARLY TREATMENT FOR CHILDREN WHO STUTTER

Every preschool child who shows early signs of stuttering should receive immediate treatment, points out Dr. Isaac W. Karlin of the Speech Clinic of the Jewish Hospital of Brooklyn.

Stuttering occurs in about 1 to 2 per cent of the population, Dr. Karlin says in an article in the June 24 *Journal of the American Medical Association*.

The condition always begins in early childhood and is approximately four times as common among boys as among girls, he adds.

"A child of about three or four may begin to repeat words or sounds," Dr. Karlin says. "He may show only an occasional slight hesitation in his speech and while speaking may stop suddenly as if groping for a word.

"There are no drugs today for the treatment of stuttering. The treatment is through the parents. The child's attention should not be drawn to his speech difficulty. In his presence the parents should talk in a simple, easy manner. They should not try to increase or improve his vocabulary. They should notice the situations or circumstances during which he talks best, and these conditions should be encouraged. Conditions under which he stutters more should be discouraged.

"Self-reliance should be encouraged, especially in eating and playing. A period of relaxation should be provided every day during which the mother reads to the child in a calm and easy manner.

"A question frequently is posed about the relationship between handedness and stuttering. There would appear to be no reason to believe that there is any. However, every child with a speech disorder should be encouraged to develop his dominant hand, be it left or right."

FINDS PERSONS WITH BLUE EYES SUSCEPTIBLE TO CANCER CAUSED BY SUNLIGHT

Blue-eyed persons are more susceptible to cancer caused by exposure to the sun's rays than are brown-eyed persons, a study made by a Santa Monica (Calif.) doctor shows.

Racial stock apparently is an important factor in determining the amount of sunlight to which a person can be exposed safely, Dr. A. Fletcher Hall of the Graduate School of Medicine, University of Southern

California, says in *Archives of Dermatology and Syphilology*, published by the American Medical Association.

Dr. Hall bases his conclusion on study of 100 persons with skin cancer.

"There are certain racial stocks and hereditary complexion patterns in which sunlight is not an important, if any, factor in skin carcinogenesis," Dr. Hall says. "These include certainly the Negro and Oriental races, probably the Mexican and Mediterranean and possibly all homozygous brown-eyed persons (those who inherited brown eyes from both parents).

"There are certain racial stocks and hereditary complexion patterns in which sunlight is by far the most important carcinogenic factor when repeatedly encountered in erythema-producing quantities. These include certainly those of Irish-Scotch-English ancestry, probably the blue-eyed North Europeans and possibly all homozygous blue-eyed persons.

"Observations suggest that the more brown-eyed inheritance a person possesses, the better protected he is from the carcinogenic rays of the sun. Blue-eyed children of blue-eyed parents are, in general, the most susceptible, but many of these are capable of tanning without repeated burning and thus acquire a fair degree of immunity."

(Continued from page 301)

Dr. E. C. Davis received many deserved honors. He was President of the Fulton County Medical Society and the Medical Association of Georgia. He was early made a Fellow of the American College of Surgeons. His University of Georgia called upon him for a Commencement Oration. Emory University conferred upon him an LL.D. Base Hospital 43 gave his portrait in uniform to the Emory Hall of Fame.

Dr. E. C. Davis retired from the active practice of medicine in 1929 due to his failing health. He finally lost his eyesight but in the home he loved so well he could move about at ease with Mrs. Davis seeing to it that everything was left just as he remembered it.

In his last illness Dr. Davis was a patient at Davis-Fischer with Mrs. Davis constantly at his side. Despite his illness, Dr. Davis, always the acute diagnostician, heard of the severe sickness of one of his nurses. Her case had remained undiagnosed. On hearing of her symptoms he recognized them as those of diphtheria and saw to it that she had immediate attention.

Dr. E. C. Davis died at Davis-Fischer Sanatorium, Atlanta, on March 11, 1931.

He left many legacies: to his country, eight children and twenty-four grandchildren; to his profession, his devoted disciples and two sons, Dr. Shelley C. Davis, surgeon, and Dr. Robert Carter Davis, internist, both practicing in Atlanta; to his children, intelligence, individuality and integrity, and to his wife, the sweetest memory ever treasured.

To Dr. E. C. Davis, a monument to his profession and a dutiful son to his country, there can be no better tribute paid than this quotation from the Star-Spangled Banner:

"Tis the star-spangled banner, Oh long may it wave,
O'er the land of the free and the home of the brave."

GEORGIA DEPARTMENT OF PUBLIC HEALTH

BIOLOGIC ACTIVITIES OF THE GEORGIA TYPHUS CONTROL PROGRAM

Rodent investigations performed in the biologic section of the Typhus Control Service, together with the investigation of reported human typhus fever cases are the principal means of pre-determining the needs for and ascertaining the effectiveness of typhus fever control measures. The typhus fever case investigation phase of the Typhus Control Program has been previously reported.¹ Rodent investigations include rat ectoparasite and rat blood serologic studies.

Field activities include trapping, combing, and bleeding of an adequate sample of the rat population in order to determine the rat ectoparasite infestation, the prevalence of murine typhus fever in rats, and the geographic distribution of rats.

Laboratory activities include identification of rat ectoparasite specimens, examination of rat blood specimens and the completion of biologic reports. The examination of rat blood specimens consists of the complement-fixation test for murine typhus fever. This test is made by U. S. Public Health Service Serology Laboratory at Chamblee, Ga. Results of these tests are consolidated with rat ectoparasite data in order to determine the type and extent of control measures to be applied.

The rodent investigative phase of the Typhus Control Program was organized in January, 1946. During the first year rodent surveys were made at intervals of about one week out of every six in counties participating in the Typhus Control Program. This method of making rodent surveys resulted in only a very small percentage of the rat population being sampled.

The second year, larger areas were covered by the biologic personnel, and in 1948 trapping stations were more numerous. The present rodent survey program was inaugurated in 1949. The biologic teams operate through the heavier reported typhus areas of the State. For trapping purposes, county maps are arranged to show the militia districts which are divided by grid lines into smaller areas and with all premises indicated on the maps. This planning makes it possible to obtain adequate samples of the rat population from each militia district within the county.

Traps are placed on at least 10 per cent of the premises as determined by the formula for sampling a "finite universe". This formula for determining the size of sample is as follows:

$$n = \frac{N (Pq)}{S^2 (N-1) + Pq}$$

n = Size of sample = number of rats to be trapped in each militia district sampled.

N = Estimated number of rats in sample area.

P = Expected per cent of rats infected with typhus fever in sample area.

q = $(1-P)$ or per cent of rats not infected.

S = Proposed standard deviation.

From the value of n , the number or per cent of premises on which traps are to be set may be determined by using the following assumptions:

(1) The number of rats in a given area is estimated to be approximately that of the number of persons within the given area.

(2) The estimated number of dwellings has been one (1) for each five (5) persons, based on the average size families in Georgia.

This method of determining the size of sample provides a uniform system for determining the number of premises within the county from which rats are to be trapped.

The location of rats infected with murine typhus fever and of rats infested with possible vectors of the disease enables the operation crews to properly place the DDT dust for the best results in the control of rat ectoparasites. Currently posting the biologic data on county maps, a more complete picture may be had of the need for control measures in the individual counties. These maps show the distribution of the rat population by species, the location of rats infected with typhus fever, and the location of human typhus fever cases. From these maps, the suspected foci of typhus fever infection in humans and rodents may be indicated. Control measures, such as DDT dusting and rat eradication, when applied at the suspected foci of infection is more effective and less expensive than applying control measures on a county-wide basis.

Rodent investigations are made in areas that have been dusted previously with DDT and those that have never been dusted. The inspections of premises where traps are to be placed, in the DDT dusted areas, enables the biologic personnel to determine if the DDT dust has been properly applied. Any irregularities are reported to the immediate supervisor in order that corrections may be made by the operations crew.

From 1946 to 1949, the biologic work was performed in each of the following counties: Bulloch, Burke, Coffee, Colquitt, Crisp, Dougherty, Evans, Ware, and Worth. These counties actively participated in applying control measures during this period. While there were more counties participating in the Typhus Control Program each year, numbering 24 in 1946, 37 in 1947, 46 in 1948, and 46 in 1949, only these nine counties were included in the rodent investigations each consecutive year for the four-year period.

Tables 1, 2, and 3 are based on the rats examined from each of the nine counties as previously listed. In these evaluations the DDT dusted areas are those areas that were dusted with DDT from 1-180 days previous to the date that the rats were trapped. The non-dusted areas are those areas that have never been dusted with DDT and those that have not been dusted for a period of one year or longer.

TABLE 1

Presence of Antibodies in Commensal Rats by Years

Year	No. of Rats Examined	No. of Rat Bloods Examined	Per Cent of Rat Bloods Positive to Typhus Fever
1946	1477	1172	35.6
1947	1036	849	26.8
1948	819	566	16.8
1949	1943	1555	7.7

The percentage of typhus infected rats examined in the biologic work has shown a marked decrease since 1946, as shown in Table 1. This decrease from 1946 through 1949 was 78.4 per cent. This percentage decrease in the number of typhus infected rats compares favorably with the 70.8 per cent decrease in reported incidence of human typhus for the same nine (9) counties and for the same period. The reported incidence of human typhus cases was 103 in 1946 and 30 in 1949, or a decrease of 70.8 per cent.

TABLE 2

Average Number of Fleas (All Species) Per Rat Examined in the DDT Dusted and Non-Dusted Areas

	No. Rats Examined		Total All Rat Fleas Recov'd		Rat Flea Index		Reduction Rat Flea Index Columns No's. 5 & 6
Year	DDT Dusted Area	Non- Dusted Area	DDT Dusted Area	Non- Dusted Area	DDT Dusted Area	Non- Dusted Area	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1946....	702	775	1915	6355	2.73	8.20	67.0%
1947....	544	492	803	2061	1.49	4.19	65.0%
1948....	552	267	780	624	1.41	2.34	39.8%
1949....	1390	553	2703	2261	1.94	4.09	52.5%

The effectiveness of DDT dust on the destruction of rat fleas is shown in Table 2 by comparing the rat flea index for the DDT dusted areas and non-dusted areas. This degree of effectiveness varies with the species of fleas. The effect of DDT dust is greater on the non-sticktight flea than on the sticktight flea (*Echidnophaga gallinacea*).

In Table 3 it may be noted that the per cent reduction of the *X. cheopis* flea index from the non-dusted to the DDT dusted area is greater than the reduction shown in Table 2 for all species of rat fleas. The *X. cheopis* rat flea is the principal vector of murine typhus fever and is a non-sticktight type of flea.

On the basis of the biologic activities, it has been shown that DDT dusting and rat eradication when applied as typhus control measures

TABLE 3

Average Number of X. Cheopis Fleas Per Rat Examined in the DDT Dusted and Non-Dusted Areas

	No. Rats Examined		No. X Cheopis Fleas Recov'd		X. Cheopis Flea Index		Reduction Rat Flea Index Columns No's. 5 & 6
Year	DDT Dusted Area	Non- Dusted Area	DDT Dusted Area	Non- Dusted Area	DDT Dusted Area	Non- Dusted Area	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1946	702	775	471	2373	.67	3.06	78.2%
1947	544	492	96	595	.18	1.21	85.1%
1948	552	267	129	134	.23	.50	54.0%
1949	1390	553	653	647	.47	1.17	59.9%

have produced definite results in the lowering of the human and rodent typhus infection rates.

ROY J. BOSTON, *Director*
Typhus Control Service.

REFERENCE

1. Boston, Roy J.: Case Investigations and Control of Murine Typhus Fever in Georgia, J. M. A. Georgia 38:308-309 (July) 1949.

NEWS ITEMS

Dr. Frank K. Boland, Sr., Atlanta, was recently elected president of the Georgia Hygiene Council. Dr. C. D. Bowdoin, Atlanta, venereal disease control director of the Georgia Department of Public Health, is the new secretary-treasurer. Objectives of the council include building of healthy, happy home life; protection of young people from prostitution and sexual exploitation; prevention of promiscuous conduct which spreads venereal disease; preparation of young people for marriage and parenthood, and promotion of the highest standards of public and private morals.

* * *

Dr. James M. Bryant, Newnan, was recently released from the Medical Corps of the U. S. Army, after serving two years in service, one of which was spent in the Philippines. Dr. Bryant will again be associated with Dr. R. H. McDonald in the practice of medicine, with whom he was formerly associated before his Army service.

* * *

Dr. T. Luther Byrd, Atlanta, was elected president of the American Association of Milk Commissions, Inc., at the annual meeting held in New York City, June 18-20.

* * *

Dr. R. Frank Cary, Macon, head of the Macon-Bibb Health Center, recently declared that the biggest single problem confronting Macon today is tuberculosis. Dr. Cary said two steps need to be taken in Bibb County immediately to arrest the spread of the disease—the establishment of a mobile x-ray unit and a local sanatorium. He said there are 68 persons in Bibb County today with positive cases of tuberculosis—meaning that they are carriers and spreaders of the disease and are “endangering the public.” Most of these persons have advanced stages of TB and don’t stand a chance of getting into Battey State Hospital at Rome, Dr. Cary said. In addition, there are about 180 other cases in Bibb County that aren’t positive yet but “ought to go” to Battey, Dr. Cary said. “If we had 68 people in Macon apt to spread polio,” Dr. Cary said, “everybody would be alarmed.” He added quickly: “TB is a bigger health menace than polio.” Dr. Cary said lack of funds is holding back the fight against tuberculosis across the State.

* * *

Dr. C. P. Cobb, Jr., graduate of the University of Georgia School of Medicine, Augusta, announces the

opening of his office for the practice of medicine in Douglasville. Dr. Cobb interned at the Baptist Hospital, Memphis, Tenn. and has just completed his residency at Lawson VA Hospital, Chamblee.

* * *

The Crawford W. Long Memorial Hospital staff held its regular monthly dinner meeting at the hospital, Atlanta, May 9. Program: "Tumors in Children", Case Presentations and Statistics in Crawford Long and Jessie Parker Williams hospitals. The pediatric section met in Clinic Lecture room: "Mortality Statistics", Dr. Edwin Webb. Medical section in Medical Library: "Some Clinical Aspects of Rheumatic Heart Disease", Dr. William Fackler. Surgical section in Clinic Reception room: "The Neurogenic Bladder", Dr. James H. Semans. General practitioners in Nursing School Auditorium: "General Adaptation Syndrome", Dr. F. C. Miles.

* * *

Dr. Raymond L. Crispell, Atlanta, chief of neuropsychiatry for the Veterans Administration in seven Southeastern states, discussed human emotions at a mental health institute sponsored by the Georgia League of Nursing Education held recently in Atlanta. Emotional factors can cause ailments ranging from high blood pressure to skin rash in "this neurotic age", Dr. Crispell said. "We're living in an age of neurosis," he asserted. "The pace of life has been stepped up. We're confronted with all sorts of stresses, which may cause—or complicate—physical disorders." He said a doctor could make countless x-rays and laboratory tests and not discover the cause of a patient's illness. He also must consider the patient's mind, emotions and environment. Dr. Crispell added. He told the nurses they should be tolerant, tactful, understanding, confidential, self-assured, loyal and personal. "What is worse than an impersonal doctor or nurse?" he asked.

* * *

Dr. Schley Gatewood, Americus, recently attended the International Congress of Obstetricians and Gynecologists held in New York City.

* * *

The Georgia Baptist Hospital Medical and Surgical Staff held its regular dinner meeting at the hospital, Atlanta, June 20. The clinicopathologic program was very interesting. Dr. J. G. McDaniel, secretary.

* * *

The Georgia Heart Association, Inc., will hold its second annual meeting in Atlanta, September 15 and 16. Tentative plans call for committee meetings and a meeting of the Board of Directors on Friday evening, September 15. The program for Saturday, September 16, will include an outstanding scientific session, a panel for laymen, and a business meeting. A dinner meeting will conclude the program Saturday evening. You will be advised when the program is completed. In the meantime, circle the dates on your calendar and plan to attend. Dr. J. Gordon Barrow, secretary.

* * *

The Georgia Medical Society held its regular meeting at 612 Drayton Street, Savannah, June 13. Program: "Doctors' Role in the Rehabilitation Program", Mr. H. B. Cummings, Atlanta, regional representative, Federal Security Agency, with movie "Comeback". Dr. Sam Youngblood, Jr., secretary.

* * *

The Georgia Orthopedic Society held its annual meeting at the Cloister Hotel, Sea Island, May 20. Dr. Peter B. Wright, Augusta, was elected president to succeed Dr. Thomas P. Goodwyn, Atlanta, and Dr. J. I. Hall, Macon, was named secretary. The following physicians read papers dealing with orthopedic problems at the meeting: Dr. C. E. Irwin, Warm Springs; Dr. Paul Rieth, Atlanta; Dr. Jack Hughston, Columbus; Dr. Thomas P. Waring, Savannah; Dr. Joseph

H. Boland, Atlanta, and Dr. Peter B. Wright, Augusta. The meeting adjourned at 12:30 and afterwards the physicians and their wives gathered for a luncheon at the hotel. Twenty-five physicians attended the session and voted to meet again at the Cloister next year.

* * *

Dr. J. W. Ellis, Kennesaw physician, at 82, will be the oldest active member of the medical staff when Kennestone Hospital begins admitting patients on Campbell Hill near Marietta's northern limits. Dr. Ellis is Kennesaw's only full-time physician. He will open a new chapter in an arduous half-century career as staff member of Kennestone. He has brought most of Kennesaw's 600-odd souls into the world and intends to avail himself of the new plant's full resources. He is one old timer who lets go of the past without crying about it. Dr. Ellis graduated from the Georgia College of Eclectic Medicine and Surgery, Atlanta, in 1900, and became a practicing Georgia physician April 4, 1900. He is also a farmer. He owns three farms in the immediate Kennesaw area and confided, "I also keep tab on five tractors and nine mules."

* * *

Dr. Murdock Euen, Atlanta, was elected vice-president of The American Broncho-Esophagological Association at the recent annual meeting held in San Francisco, Cal., which he attended.

* * *

The Georgia Tuberculosis Association recently held its annual meeting in Macon. Dr. H. C. Schenck, Atlanta, director of the division of tuberculosis control of the Georgia Department of Public Health, was re-elected president. Under the group's newly-adopted constitution, the office of vice president was tossed out and Julian C. Sipple, Savannah, who had been serving as vice president, was chosen president-elect. The board of directors is composed of one member from each of Georgia's ten congressional districts. Dr. Schenck was one of the principal speakers at the convention which attracted about 125 representatives of 50 Georgia counties. Other speakers included Edward Sierks, the health education consultant for the National Tuberculosis Association and William A. King of the University of Georgia.

* * *

Dr. Thomas M. Hall, Milledgeville, and Dr. Charles E. Sax, Savannah, both officers in the Air Force Medical Reserve, recently completed a 15-day tour of active duty at Chatham Air Force Base, Savannah. They took advantage of the current Air Force reserve training program which entitles them to take short active tours of duty in either the United States or abroad.

* * *

Dr. Seale Harris, Birmingham physician, was honored with a tea at Rich's Department Store in Atlanta on June 2, at which time he gave a review of his new book, "Woman's Surgeon", the life story of Dr. Marion Sims.

* * *

Dr. Willis M. Hendricks, LaGrange, recently attended the International Congress of Gynecologists and Obstetricians held in New York City.

* * *

Dr. Shannon Mays, Macon, was the guest speaker at a joint meeting of the Chatham-Savannah Health Council and the Savannah Mental Hygiene Society held at the DeSoto Hotel, Savannah, May 16. His subject was "How Grown Up Are You, Anyway?" Following the address the Mental Hygiene Society elected its officers for the coming year.

* * *

At a recent meeting of the Florida Second District Medical Association held at Quincy, Fla., Dr. J. C. Patterson, Cuthbert, spoke on the subject "Gastrojejun-

colic Fistula." He also displayed and described the much discussed Rush pin used for holding bone fractures in place.

* * *

Dr. James E. Paullin, Atlanta, was honored at a dinner of Emory University medical alumni held on June 2. In tribute to him two projects were adopted by the alumni: a James E. Paullin scholarship fund was established to help needy and worthy medical students finish their education, and a portrait of Dr. Paullin will be placed in an appropriate place in the university.

* * *

Valdosta State College announced the appointment of Dr. R. E. Perry, Valdosta, as college physician for next year. Currently Dr. Perry is filling out the unexpired term of the late Dr. Marian E. Farbar.

* * *

The Ponce de Leon Infirmary, Eye, Ear, Nose and Throat, announces the association of Dr. Morgan Raiford as director of the eye department, 144 Ponce de Leon Avenue, N. E., Atlanta.

* * *

Dr. Louis C. Rouglin, Atlanta, was recently honored for a half century of medical practice at a testimonial given by close friends and members of the medical profession. The occasion included a cocktail party and later a dance at the Mayfair Club in Atlanta. Dr. Irving Greenberg was the toastmaster.

* * *

Dr. Albert F. Saunders, Valdosta, announced recently that he would practice medicine in Lakeland at the Louis Smith Memorial Hospital which he leased a short time ago. He stated that as his practice in Lakeland demanded it he would devote more of his time to the community and the hospital.

* * *

At an all-day conference of the Savannah Tuberculosis Association held on May 15 at the DeSoto Hotel a goal of 60,000 x-ray pictures during 1950 was set. This would be the biggest detection program ever conducted in Savannah, except in 1945 when the federal government cooperated with the state and local governments and 71,000 pictures were taken. Delivery on the association's new mobile x-ray unit is expected within a short time.

* * *

The Sixth District Medical Society held its summer meeting at the high school auditorium, Sandersville, on June 28.* Program: Address of Welcome by Dr. F. T. McElreath, Jr., Tennille; "Erythema Multiforme Following Herpes Simplex," Dr. R. M. Reifler, Macon; "Disease of the Biliary Tract," Dr. J. Benham Stewart, Macon; "Chronic Stenosis of the Larynx—Case Report," Dr. W. L. Barton, Macon; "The Complications of Myocardial Infarction," Dr. Tom Ross, Macon; Official Remarks by Dr. L. D. Porch, Macon, first vice-president of the Medical Association of Georgia. Officers are Dr. J. I. Hall, Macon, president; Dr. George Alexander, Forsyth, vice-president; Dr. A. M. Phillips, Macon, secretary-treasurer.

* * *

Dr. Clifton H. Smith, manager of the Peachtree Road VA Hospital in Atlanta, has been appointed manager of the new VA hospital in Augusta, which the Veterans Administration took over from the Army June 30. Accompanying his move were 225 patients who were transferred from Atlanta to the new VA hospital in Augusta. The new hospital is connected with Oliver General Hospital.

* * *

Dr. R. A. Vonderlehr, Atlanta, medical director of the Communicable Disease Center, U. S. Public Health Service, announced that studies on the common eye gnat of the southern United States were recently undertaken at a field station at Thomasville.

Intensive field work will be carried on during the summer months, when the eye gnats are most prevalent. The Public Health Service is trying to discover if the abundance of these insects has any relation to the prevalence of a conjunctivitis, commonly called "gnat sore eye," or "pink-eye," which occurs in the same areas.

* * *

Dr. W. L. Pomeroy, Waycross, was the principal speaker at the monthly meeting of the Ware County Medical Society held May 4 in Blackshear with Pierce County doctors as hosts. Dr. Pomeroy told the doctors that the prepayment medical and hospital program effectively administered would eliminate all talk of need for socialized medicine. Dr. W. F. Reavis, Waycross, president-elect of the Medical Association of Georgia, was congratulated on his recent election and spoke briefly.

* * *

Dr. Alexander T. Murphey, Augusta, recently was awarded a Damon Runyon cancer research fellowship. The grant, which amounts to \$4,200, was given in recognition of the work now in progress in the Department of Oncology of the Medical College of Georgia, which is headed by Dr. Hoke Wammock. Dr. Murphey will assist Dr. Wammock in research connected with metabolic disturbances in cancer and the behavior of cancer. The fellowship award was made through the medical and scientific committee of the American Cancer Society.

* * *

Dr. M. E. Winchester, Brunswick, administrator of the Brunswick City Hospital, was elected chairman of a Southeastern Council of the Georgia Hospital Association organized May 19 at a meeting at the Oglethorpe Hotel, Savannah. Managers of institutions in Brunswick, Savannah, Folkston, Waycross, Jesup, Valdosta, Alma, and Douglas will serve as members of the council. The general aims of the organization, said Dr. Winchester, are to increase cooperation among the member hospitals, to raise the level of efficiency, and to seek a general expansion of hospital services in South Georgia.

* * *

Dr. Tom D. Spies, Dr. Robert E. Stone, Dr. Samuel Dreizen, and other members of the staff of the Nutrition Clinic, Hillman Hospital, Birmingham, conducted on June 13, an all-day conference on cortisone, the first of its kind ever to be held. Some four hundred physicians attended the conference from Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina and Tennessee.

* * *

The Crawford W. Long Memorial Hospital Staff held its regular monthly departmental meetings at the hospital, Atlanta, June 13. Medical section: "The Pulmonary Symptoms of Cardiac Decompensation." Dr. James V. Warren. Pediatric section: "Mortality Statistics," Dr. J. C. Flanagan. Surgical section: "Inguinal Hernias," Dr. William Whitaker. General practitioners: "My Experience in Treating Alcoholics With Antibus," Dr. Luther M. Vinton.

* * *

Dr. Wm. Pruitt Woodall, Thomaston, recently spent several weeks at Mayo Clinic, Rochester, Minn., where he observed surgery and attended lectures on surgery and gynecology. He also spent some time at Lahey Clinic, Boston, Mass., where he studied gynecology and again observed surgery.

* * *

Dr. Joseph Yampolsky, Atlanta pediatrician, who laughingly insists babies make the best patients "because they never lie" recently left to attend the International Pediatric Congress in Zurich, Switzerland. Dr. Yampolsky, member of the staff of the Baby Clinic

at Central Presbyterian Church, Atlanta, for 28 years, also will inspect baby clinics and hospitals throughout France. He will visit Norway, Sweden, Denmark, France and England as well as Switzerland, and will take part in a panel on congenital syphilis in Zurich. "And I plan to observe first-hand, he said, the widely discussed system of medicine in Britain." Dr. T. F. Davenport, Atlanta, medical director of the Baby Clinic at Central Presbyterian Church, lauded the long service of "our universally beloved Dr. Yan." A native of Russia, Dr. Yampolsky came to Georgia when he was 14 years old. He studied at Boys' High School and the University of Georgia and was graduated from Columbia University College of Physicians and Surgeons, New York City, in 1917. He long has served as associate professor of pediatrics at Emory University School of Medicine.

OBITUARY

Dr. Benjamin Bashinski, aged 64, prominent Macon pediatrician, died unexpectedly while on a fishing trip at Atkinson, May 20, 1950. He was a native of Tennessee and graduated at Tulane University of Louisiana School of Medicine, New Orleans, La., in 1916. He interned at Touro Infirmary in New Orleans and taught at Tulane. He practiced in New Orleans for a time and served as assistant to the chief of pediatrics at Tulane. He was later appointed resident physician at the Boston Floating Hospital, Boston, Mass. He served in World War I, and following his discharge returned to Macon. Dr. Bashinski was a member of the Bibb County Medical Society, the Medical Association of Georgia and a fellow of the American Medical Association. He was a past president of the Georgia Pediatric Society, and was a charter member of the American Academy of Pediatrics. He served for a number of years on the staff of Macon Hospital. Dr. Bashinski was one of eight Macon physicians who purchased the old Williams Sanitarium and changed the name to Middle Georgia Sanitarium. This later became the Middle Georgia Hospital, Macon. He was also a member of the Congregation Beth Israel, was a charter member of the Macon Kiwanis Club and the Idle Hour Country Club, was a member of the Elks Club and the Satilla River Club. He is survived by his wife, the former Miss Bernice Rosenberg, Macon; a daughter, Mrs. Edwin Odom, and a son Benjamin Bashinski, Jr.; two grandchildren, Linda Odom and Edwin Odom, Jr.; one sister, Mrs. J. M. Witman, Macon. Funeral services were held at Hart's Mortuary with Dr. I. E. Marcuson officiating. Burial was in William Wolff Cemetery, Macon.

* * *

Dr. Wave Wilbur Blackman, aged 69, Atlanta physician, died in a private hospital, June 16, 1950. Dr. Blackman was born in Wauseon, Ohio, and graduated from Georgia College of Eclectic Medicine and Surgery, Atlanta, in 1913. When he first moved to Atlanta, Dr. Blackman purchased Robertson Sanitarium, which was renamed Blackman Sanitarium. He had practiced medicine in Atlanta for more than 44 years. He was a member of the Fulton County Medical Society, the Medical Association of Georgia, and a fellow of the American Medical Association. He was also a member of the Phi Delta Theta fraternity. Dr. Blackman was a Mason and a Shriner. Surviving are his wife, Mrs. Wave Wilbur Blackman; a son, Edwin T. Blackman, Carrollton; a daughter-in-law, Mrs. Wilbur L. Blackman; two sisters, and five grandchildren. Funeral services were held at Spring Hill with Dean John B. Walthour and Mr. D. W. Durden, Jr., officiating.

* * *

Dr. George Hess, aged 49, Chief Medical Officer of the U. S. Penitentiary Hospital, Atlanta, died May 12, 1950. The cause of death was coronary thrombosis.

Dr. Hess was born in Beaufort, S. C., July 16, 1900, and spent his childhood in Hampton, Va. He graduated from the Medical College of Virginia, Richmond, in 1923. Internship was in the U. S. Marine Hospital, U. S. Public Health Service, Norfolk, Va. He remained in the U. S. Public Health Service his entire career, and was assigned to the Department of Justice, Bureau of Prisons, after his internship. His first assignment was at the Federal Reformatory, Chillicothe, O., where he specialized in mental hygiene.

In 1933, Dr. Hess was assigned to the U. S. Penitentiary, Atlanta. He was transferred to the Federal Prison at Alcatraz Island, Calif. in 1934, when he was transferred to Terminal Island, Calif., and since 1941 he has been the Chief Medical Officer of the U. S. Penitentiary, Atlanta. His rank at the time of his death was Medical Director (R).

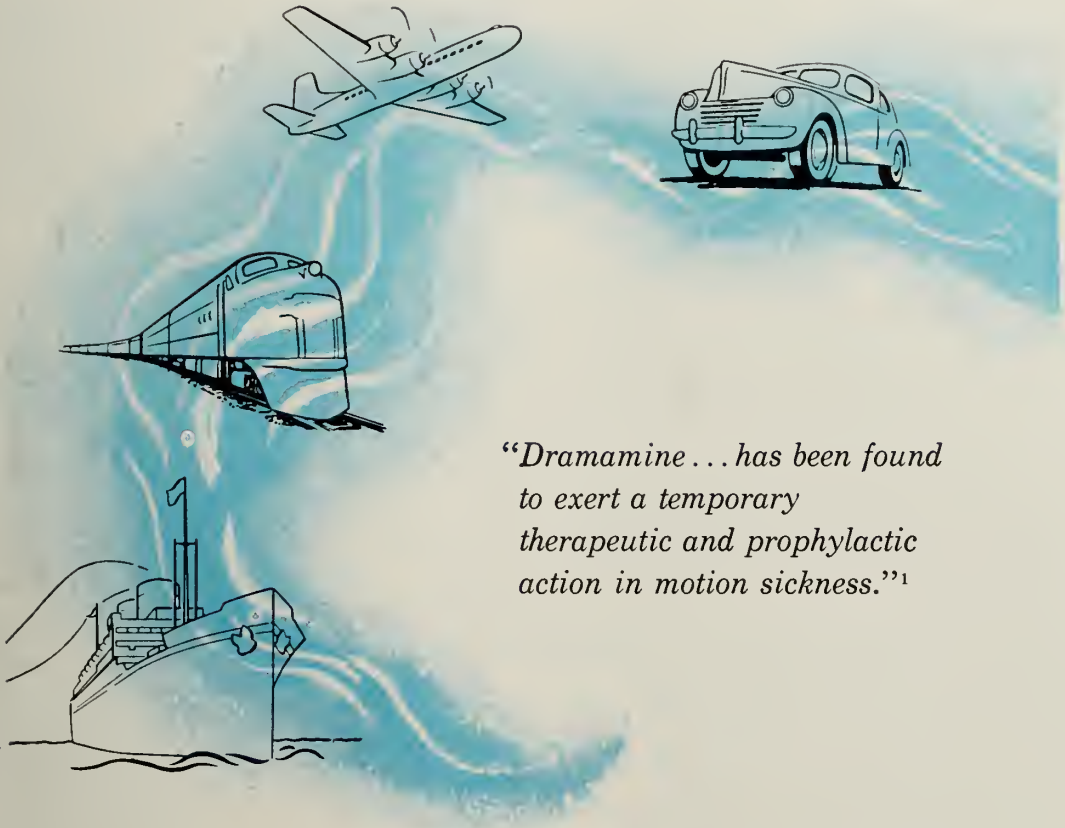
Dr. Hess was a member of the Fulton County Medical Society, the Medical Association of Georgia, a fellow of the American Medical Association, a fellow of the American College of Surgeons, a member of Military Surgeons and of the Southern Medical Association. He is survived by his wife, the former Miss Phyllis Park, Richmond, Va.; a daughter, Miss Phyllis Hess; and a sister, Mrs. Joseph Rowe, Hampton, Va. Funeral services were held at Spring Hill, Atlanta, with the Rev. J. Milton Richardson of St. Luke Episcopal Church, and Father Henry Phillips, U. S. Penitentiary Chaplain, officiating. Burial was in Arlington National Cemetery, Washington, D. C., with full military honors.

* * *

Dr. Edward Bailey Hutcheson, aged 93, widely known Buchanan and Haralson County physician and surgeon, died at the home of his daughter, Mrs. Josh Cody, at Moorestown, N. J., May 12, 1950. Dr. Hutcheson was born in Haralson County, the son of the late Robert B. and Ellen Hogue Hutcheson. He graduated from Emory University School of Medicine, Atlanta, in 1891. Dr. Hutcheson served the people of Haralson County for over half a century, never turning down a call, no matter how bitter the night or what the distance. In the course of his career, Dr. Hutcheson used several modes of transportation, starting out by riding a horse, later using a horse and buggy, and when the automobile industry was in its infancy, driving a one-cylinder Brush automobile. He was an honorary member of the Carroll-Douglas-Haralson Medical Society, the Medical Association of Georgia; and the American Medical Association. He was a member of the Buchanan Baptist Church. He was a power in Haralson County politics for many years, and had served his constituents in the House of Representatives. He is survived by a daughter, Mrs. Josh Cody, Moorestown, N. J.; two sons, A. V. Hutcheson and A. D. Hutcheson, both of Buchanan; one brother; one sister; 21 grandchildren and 27 great-grandchildren. Funeral services were held at Buchanan Baptist Church with the Rev. M. F. Roberts, Decatur, officiating. Burial was in Buchanan Cemetery, Buchanan.

* * *

Dr. James Harvey Butler, aged 56, well known Augusta physician, died at his residence June 8, 1950. A native of Dooly County, Dr. Butler graduated from the University of Georgia School of Medicine, now the Georgia Medical College, Augusta, in 1914. Dr. Butler was associate professor of clinical medicine at the Medical College of Georgia. He was a member of the Richmond County Medical Society, the Medical Association of Georgia, and a fellow of the American Medical Association. He is survived by his wife, Mrs. Eleanor Keith Butler; a daughter, Miss Eleanor Butler; three sisters, a brother, and several nieces and nephews. Funeral services were held at Platt's Chapel with the Rev. Allen B. Clarkston officiating. Burial was in Westever Memorial Park Cemetery, Augusta.



"Dramamine... has been found to exert a temporary therapeutic and prophylactic action in motion sickness."¹

Dramamine

for the Prevention
or Treatment of
Motion Sickness



Unusually satisfactory results have been obtained with Dramamine* (brand of dimenhydrinate) as a prophylactic or active therapeutic agent for the relief of nausea, vomiting or dizziness, which many individuals experience in travelling by ship, airplane, train and other vehicles.

1. Council on Pharmacy & Chemistry: New and Non-official Remedies, 1950, Philadelphia, J. B. Lippincott Co., 1950, p. 460.

*Trademark of G. D. Searle & Co., Chicago 80, Ill.

SEARLE

RESEARCH IN THE SERVICE OF MEDICINE

THE AMERICAN CONGRESS OF PHYSICAL MEDICINE

Will hold its twenty-eighth annual scientific and clinical session August 28, 29, 30, 31 and September 1, 1950 inclusive, at the Hotel Statler, Boston. Scientific and clinical sessions will be given on the days of August 28, 29, 30, 31 and September 1, 1950. All sessions will be open to members of the medical profession in good standing with the American Medical Association. In addition to the scientific sessions, the annual instruction seminars will be held August 28, 29, 30 and 31. These seminars will be offered in two groups. One set of ten lectures will consist of basic subjects and attendance will be limited to physicians. One set of ten lectures will be more general in character and will be open to physicians as well as to therapists, who are registered with the American Registry of Physical Therapy Technicians or the American Occupational Therapy Association. Full information may be obtained by writing to the American Congress of Physical Medicine, 30 North Michigan Avenue, Chicago 2, Illinois.

The JOURNAL would like to record the scientific work of Georgia physicians. It earnestly requests, therefore, that each physician in the State who publishes a contribution in some other medical periodical submit an abstract of the article for these columns.

WANTED—Roentgenologist for mental hospital. Attractive salary and partial maintenance. Two excellent colleges in immediate vicinity. Submit full information, three references and small photograph in first letter. Address Superintendent, Box 325, Milledgeville, Ga.

LONG established hospital for immediate sale in South Georgia—Surgeon in charge retiring. Well equipped and fully accredited by College of Surgeons. Nurses home and doctors' apartments joining hospital. Contact Journal Medical Association of Georgia, 478 Peachtree St., N. E., Atlanta, Ga.

WANTED — County Health Officer for Lowndes County. Young man with public health experience preferred. For details write Dr. J. L. Campbell, Jr., Valdosta, Ga.

WANTED—Young man, general practitioner, in West Middle Georgia, Georgia License required. Will guarantee \$6500.00 first year, possible to make \$10,000 to \$12,000. Write or contact MAG, 478 Peachtree St., N. E., Atlanta, Ga.

BALLARD'S

Dispensing Opticians



WALTER BALLARD OPTICAL CO.

THREE STORES

105 PEACHTREE STREET, N. E.
MEDICAL ARTS BUILDING
W. W. ORR DOCTORS BUILDING

THE JOURNAL OF THE *MEDICAL ASSOCIATION OF GEORGIA*

PUBLISHED MONTHLY under direction of the Council

Vol. XXXIX

Atlanta, Georgia, August, 1950

No. 8

TODAY'S INDICATIONS FOR CESAREAN SECTION

M. M. SCHNEIDER, M.D.
Savannah

The controversy as to the proper indications and contraindications relative to the performing of cesarean section rages unabated from one end of our country to the other. It would seem that the heads of certain clinics are able to find more indications than others. Although the results seem to justify their actions, it is my belief that a review of the subject is in order.

Because there are certain variations in human beings, it is impossible to treat patients along the line of set mathematical principles. It is the ability to judge and measure the various disease factors by new methods that gives us today's indications for cesarean section.

For centuries cesarean section on the dead has been performed and this operation has been referred to in the myths and folklore of European races. The Lex Regia of Numa Pompilius, 715 B.C., Buddha, and the ancient Jews expressly commanded the removal of the child before the burial of the mother.

Cesarean section on the living is of more recent date. That the Jews did the operation successfully is shown by their laws. In the Mischnejah (before 140 B.C.), the rights of twins delivered by section are gravely considered and in the Talmud (400 A.D.)

the law reads: "A woman need not observe the usual days of purification after abdominal delivery." In the heart of Uganda in 1879, Felkin witnessed cesarean section performed by a native. The operator washed his hands and the operative field with banana wine, part of which had been given to the patient to drink. A quick incision opened the uterus. After cutting the cord and removing the placenta, the cervix was dilated from above, the uterus massaged and compressed; the peritoneal cavity cleansed by raising the woman up, then the abdomen was closed by pin and figure eight sutures, and the wound was dressed with a paste of crushed herbs. These savages must have been performing this type of operation for hundreds of years to have developed such good technic. The cesarean operation became definitely established in the sixteenth and seventeenth centuries in spite of the high mortality and the resulting opposition; the operation was performed only in those cases where to leave the parturient alone would certainly have resulted in her death.

There is hardly an obstetric complication that has not been treated by cesarean section. Indeed, many surgeons know of but one way out of a difficult obstetric situation; namely, suprapubic delivery. However, with the increased knowledge of surgical technic and care, both pre- and postoperative, we are able to spread the indications for abdominal delivery over a wider field, and at the same time give the baby a better chance for survival.

With the so-called modern era in surgery, we are now able to take advantage of ad-

From the Department of Obstetrics and Gynecology, St. Joseph's Hospital, Savannah, Ga.
Presented before the First District Medical Society, Statesboro, Dec. 1, 1949.

vances in anesthesiology, blood transfusions, newer oxytocics and antibiotics and thus reduce the chief dangers of cesarean section; namely, infection and hemorrhage. Due to the false sense of security, we must be careful *not* to lean too heavily on this operative procedure and thus become a "one operation" obstetrician. On the other hand, we should be able to evaluate closely enough so that we do not cause the mother to become an "obstetrical cripple" because of a maiming delivery through the vagina. With this in mind, we must not forget that there is the "cesarean cripple" due to a mismanaged case. In addition to all this, the breakdown of safety factors in the operating room may lead to the death of either the mother or the infant. The risk in a cesarean operation, we must remember, is still five to ten times greater than with the vaginal delivery.

Consideration of Indications

Inlet contractions: Contractions of the pelvic inlet, in many instances, may be recognized before the onset of labor by a high presenting part, premature rupture of membranes, overriding of the presenting part and pelvic mensuration. In diagnosing this, the work of Caldwell, Moloy, Thoms and Torpin in roentgen pelvimetry and cephalometry has come to the aid of the obstetrician. However, in no instance should the burden of the decision be placed upon the roentgenologist. The clinical picture must be evaluated along with the measurements.

The following criteria should be evaluated with a contraction of the pelvic inlet:

1. Shape of the inlet.
2. Anteroposterior diameter (true conjugate).
3. Transverse diameter.
4. Size of the head.

The shape of the inlet is of great importance. The android and anthropoid pelvises offer greater resistance to the passage of the fetus than a similar contracture of a gynecoid pelvis.

The anteroposterior diameter or true conjugate is still the greatest determining factor to be considered. The usual standards for determining management are: True conjugate above 9.5 cm. will probably deliver through normal channels; true conjugate 7 to 9.5 cm. should have a test of labor; true conjugate 7 cm. or less should have a cesarean section.

However, the above measurements are not the only ones to be considered. Another measurement of equal importance is the transverse diameter of the inlet. If this diameter is shorter than 12 cm. it is definitely contracted. When a shortened true diameter is present with a transverse diameter of 11.5 cm. or less, a cesarean operation is usually indicated.

The size of the fetus is always a factor to be considered. One must remember that the premature fetal skull will mold more readily than the fetus at term, but just how much molding the head will tolerate must be taken into consideration.

Thus it will be seen that in any given case, a particular fetus must be projected against a particular pelvis, and while general considerations apply, individual study and physical examination of each patient must be the rule.

The Müller-Hillis maneuver is probably the best method of studying the individual fetus and pelvis. This is done by placing the finger in the rectum or vagina, while the other hand presses on the fundus. In this way the head is brought down to engagement, or below, if there is no disproportion. The most dependent portion of the skull should reach an imaginary line drawn between the ischial spines. The chief sources of error in this maneuver are: the presence of a thick lower uterine segment and unfaced cervix, estimating the descent of the head lower than it actually comes, and the presence of a breech presentation; never-

theless, it is a useful test and should be applied to every pregnant woman.

Midpelvic Contraction

Midpelvic contractions are not infrequently seen in the android and anthropoid type pelvis. This is usually demonstrated during physical examination when the examiner finds unusually prominent ischial spines. The width of the sacrosciatic notch should then be palpated and, if normal, should be at least two to two and one half finger breadths. Roentgen pelvimetry should be done on these patients, and if the interischial diameter is less than 9 cm. and this is combined with a shallow sacrum, a section is usually indicated.

Outlet Contractions

Contractions of the pelvic outlet should be accurately determined before the onset of labor. It is rare that a contracted outlet is severe enough to require a cesarean section; but if so, and the baby is permitted to descend to the outlet where an arrest takes place, not infrequently a destructive operation may have to be performed or some type of maiming forceps procedure may have to be used.

In cases with a short intertuberos transverse diameter, and a short posterior sagittal diameter, the rule of 15 may hold true. That is, if the total of these diameters adds up to less than 15 cm. a cesarean section is usually indicated, whereas if the total of these diameters is 15 cm. or more the infant can usually be delivered from below.

Soft Tissue Obstruction

Cervical stenosis is most frequently the main cause of soft tissue obstruction. This may be due to dense scar tissue forming as the result of a deep thermocautery or radiation therapy to the cervix. Women who have had either type of treatment and develop a rigid cervix should receive an elective cesarean section. The same type of scar may develop as the result of an extensive tra-

chelorrrhaphy followed by postoperative infection.

As a general rule, light cautery or a short trachelorrrhaphy will not result in a sufficiently dense scar to warrant the consideration of a section.

Patients that have had trachelorrrhaphies and deliver from below will not infrequently tear the cervix again. This is not a serious complication because the torn ends may be approximated immediately following delivery with good results.

Conization of the cervix shallow or deep will, as a rule, not hinder cervical dilatation and delivery from below. In this respect, conization is to be preferred to deep thermocautery.

Extensive vaginal plastic repair work quite frequently leads one to perform an elective cesarean section. This is particularly true where the repair of a large cystocele has been done. It is relatively impossible to protect the base of the bladder from injury during delivery, and because of this a cesarean is usually indicated. In cases where the vaginal plastic has only been a perineorrhaphy, usually deep episiotomy will take care of the perineum. This may be repaired quite accurately following delivery with even better results than during the interim between babies.

A secondary repair of a complete tear of the rectal sphincter should, in my mind, automatically mean an elective section. In so many instances, secondary repairs of the rectal sphincter must be done five or six times before a good repair is achieved, that the possibility of another breakdown may be avoided.

The same line of judgment should follow extensive pelvic operations for retroflexion and prolapse of the uterus. If in the judgment of the obstetrician, a vaginal delivery would mean the undoing of all the work, then an elective section should be consid-

ered. Most frequently, however, in these cases, with good care, the patient may be delivered quite safely from below. In these cases, it is always advisable to do a wide episiotomy, and to inspect and repair the cervix immediately postpartum.

Tumors

Cystic ovaries and fibroid tumors are usually the chief offenders in this category. Some authors recommend removal of uterine myomas at about the fourth month of pregnancy if they are pedunculated and if the obstetrician feels that it will interfere with delivery. However, most cases usually proceed to term and then if the fibroid or cystic tumor is obstructing the birth canal, a cesarean is performed. At this time the tumor can be removed if the procedure is not too extensive and time-consuming so that it will endanger the patient or precipitate the so-called "crush syndrome". It must be remembered that while fibroids grow with pregnancy, frequently the involution of the uterus will proceed so rapidly that the blood supply of the fibroid may be interfered with and cause degeneration of the tumor. Therefore, it is probably wiser to remove the tumor at the time of section rather than risk a subsequent laparotomy a few days later. Here, too, one must be cautioned about an adequate closure of the defect in the uterine wall in order to lessen the risk of rupture of the uterus in subsequent pregnancies.

Carcinoma of the cervix should be an indication for cesarean section. The fetus should not be permitted to pass through and dilate the cervix. Once the fetus is delivered, treatment of the carcinoma should take place as planned.

Congenital Anomalies

Many malformations of the vaginal tract and uterus require cesarean section for delivery wherever they cause obstruction or stenosis. The double uterus is of particular

trouble and one should be very cautious. The nonpregnant half of the uterus may fall in front of the fetus and block the pelvis as effectively as a tumor.

Hemorrhage

This topic is the subject of many lengthy discussions, justly so because it is one of the commonest causes of cesarean section. Placenta previa and abruptio placenta are the two chief factors involved. Here the amount of cervical dilatation and the amount of hemorrhage must be considered.

In the primipara with the long uneffaced cervix, one has very little alternative but to do a cesarean section. In the face of active bleeding, the most rapid way of stopping the hemorrhage is to deliver the baby and placenta. In the marginal placenta previa, many times simple rupture of the membranes with or without the application of Willett's scalp traction may effectively control the bleeding by having the fetal head act as a tampon. With the use of scalp traction, enough pressure is exerted against the cervix to stimulate contractions and labor usually proceeds rapidly.

In partial abruptio placenta, the decision is somewhat more difficult to make. Where the infant is dead, the use of transfusions and a Spanish windlass may prevent the necessity of a section.

In a case where the infant has just reached the stage of viability and bleeding is not profuse, it may be wise to assume an attitude of watchful waiting in the hope that the bleeding area may clot over. The availability of blood from the regional blood bank may help the obstetrician lean towards conservative therapy in this instance.

Toxemia

This condition causes quite a bit of controversy as to therapy. In the case of a contracted birth canal, the matter of decision is simply to decide which is the propitious moment for surgery. However, in the case

of a patient with a fulminating toxemia or a rapidly progressing toxemia and an uneffaced primiparous cervix, the decision is more difficult. At one time all of these cases were handled by cesarean. Now, with more advanced means of treatment at our disposal, we are more inclined to treat the patient conservatively and induce labor. It is likely that soon toxemia will cease to be an indication for cesarean.

Heart Disease

The following criteria as set forth by Hamilton at the Boston-Lying-In Hospital may be set up as the proper procedure to follow in heart disease:

1. Normal labor with the late first stage analgesia and outlet forceps offers the least amount of heart load.
2. Cesarean section puts a greater strain on the heart.
3. Dystocia puts the greatest strain on the heart.

Cesarean section would, therefore, only be indicated when there is some prospect of obstruction to the normal progress of labor. In these cases it is possible that caudal or saddle-block anesthesia may help the cardiac patient avoid cesarean.

Other Maternal Diseases

As a general rule, whatever the disease, it should be treated as an entity and the pregnancy given second consideration. Section should be performed only for obstetric reasons. Pulmonary tuberculosis and thyrotoxicosis should be treated under the same general principles as those for heart disease. Pregnancy and thyrotoxicosis, as a rule, do not tolerate each other very well, and quite frequently labor will precipitate a thyroid crisis. The infant of such a mother should be watched closely and may need mild sedation. Rectal stricture due to lymphogranuloma inguinale may require section. Newer methods of treating this disease may soon cause this complication to disappear almost entirely.

Sterilization *per se* is not an indication for cesarean section.

Fetal Indications

Abnormalities of presentation of the fetus may be reason for cesarean section. A transverse presentation in a primipara with ruptured membranes should be sectioned even if the pelvis is normal, for, as a general rule, dilatation of the cervix will not proceed normally, and the fetus can be turned only with difficulty or not at all. The same condition in a multipara may be treated conservatively as long as there is sufficient water to permit turning the fetus after the cervix is dilated.

Breech presentations in the primipara, as a general rule, are no indication for section unless there is evidence of some contracture of the pelvis. However, in the elderly primigravida with a breech, a section is usually indicated even with normal pelvic measurements, for here the infant has a high priority. In this condition there is no way of conducting a test of labor, and a decision must be reached before the first stage of labor has been completed.

Monstrosities are not usually indications for cesarean section. The hydrocephalic infant presented by the breech can cause considerable difficulty if not recognized in time. However, most monstrosities should be treated by destructive operation after the cervix is fully dilated. Soft tissue tumors of the fetus may give rise to difficulty; these are hard to diagnose because they do not cast a shadow on roentgen examination.

Irregularities of the fetal heart have recently come to the fore as evidence of fetal distress and indications for section. Irregularities of the heart usually indicate unusual moldings of the fetal skull or a short cord. Many loops of cord may be around the fetal neck. The fetal heart slows normally during a contraction, so this slowing should be ignored. The primipara with slow dilatation and hard contractions may best demonstrate this indication. Here the fetus slowly

gets into distress and demonstrates the distress by a slowing or irregular heart action.

The primigravida over 40 years of age should usually be sectioned because of the high priority of the fetus. It is probably this mother's only chance for a living infant, and the conditions present should be weighed very closely.

The postmortem cesarean should not be forgotten as a fetal indication. In the mother that dies rapidly as the result of cerebral hemorrhage or acute heart failure, it is *not* impossible to salvage the fetus if prompt action is taken.

Repeated Cesarean Section

Many of our country's leading obstetricians adhere to the dictum: "Once a cesarean, always a cesarean". However, this is not always true. Each case should be judged by its own merits. The type of section performed, the indication and the postoperative course should all be considered.

Any case that was sectioned because of a contracted pelvis will of necessity need another section. However, a case sectioned because of a toxemia may, with proper care, be managed conservatively and be delivered from below. The same may apply to cases that were sectioned because of hemorrhage.

In cases where an attempt will be made to permit vaginal delivery following a section, the patient should, by all means, be delivered in a hospital with all the facilities available in case of emergency, and the obstetrician should be in constant attendance.

Before closing any discussion of this type, a few words should be said with reference to "Test of Labor".

Test of labor is also a problem that differs in every clinic. One obstetrician states that an adequate test of labor should run at least twenty-four hours, while another gives four to six hours as an adequate time.

Torpin defines test of labor: "Uterine

contractions lasting forty seconds, recurring every two to five minutes over a period of time of twenty-four hours with noticeable progress, the parturient being supported meanwhile by administration of water, dextrose, vitamins, oxygen and blood transfusions, if necessary, plus sedation and rest".

By following this rule, Torpin states that operative delivery can be reduced about three per cent, forceps delivery approximately two and one-half per cent, and cesarean section to one in two hundred cases.

Summary

1. Reasons for doing cesarean section have been presented.

2. There are now fewer indications for cesarean section, there being fewer indications for general medical diseases and a widening indication in local pelvic and obstetric conditions.

3. There is no substitute for careful observation of each individual case with application of all the skill at one's command.

REFERENCES

1. Paxson, Newlin F.: Modern Indications for Cesarean Section, *S. Clin. North America* 28:1487-1506, (Dec.) 1948.
2. Hamilton, and Thompson: *The Heart in Pregnancy and the Child-bearing Age*, Little Brown & Company, 1941.
3. Jondhal, Willis H.; Banner, Edward A., and Howell, Llewelyn P.: Management of Pregnancy Complicated by Toxic Goitre, *Proc. Staff Meet., Mayo Clin.*, 24:358 (June 22) 1949.
4. Hennessy, James P.: *Am. J. Obst. & Gynec.* 57:1107-1185 (June) 1949.
5. Quigley, James K.: *Am. J. Obst. & Gynec.* 58:41-53 (July) 1949.
6. Stevenson, Charles S.: *Am. J. Obst. & Gynec.* 8:432-446 (Sept.) 1949.
7. Snow, William: *Am. J. Obst. & Gynec.* 58:752-757 (Oct.) 1949.
8. Caldwell, W. E.; Moloy, H. C., and D'Esopo, D. A.: *Am. J. Obst. & Gynec.* 28:482-497, 1934.
9. Torpin, R.: *A Treatise on Obstetric Labor*, Augusta, Ga., Augusta Obstetric & Gynecology Book Company, Copyright, 1948.
10. DeLee, Joseph B.: *The Principles and Practice of Obstetrics*, ed. 7, Philadelphia, W. B. Saunders Company, 1938.

DISCUSSION

DR. DAVID ROBINSON (Savannah): I had the pleasure of reading Dr. Schneider's paper, and I appreciate this opportunity to discuss it from the viewpoint of a roentgenologist. I agree with Dr. Schneider's statement that in no instance should the burden of decision be placed upon the roentgenologist as to whether cesarean section is indicated or not. However, this does not excuse the roentgenologist from his responsibility to the obstetrician and the patient, no more than the anesthesiologist is relieved of his responsibility to the surgical patient. The responsibility of the roentgenologist is to acquaint the obstetric practitioner with those radiographic procedures available for any particular obstetric complication or problem.

As with any other medical or surgical case, there is variation in obstetric cases. It is here, by direct consultation with the roentgenologist, that such problems may be solved more easily.

Even prior to conception, the roentgenologist may be of assistance in determining which cases may be necessarily delivered by cesarean section. This information can be obtained by ruling out congenital anomalies of the vaginal tract and uterus by uterosalpingography. This simple and safe procedure can be used in all suspicious cases of congenital variations.

The simple flat film of the abdomen yields much information as to the general shape and size of the fetus, the presentation, and the presence or absence of congenital abnormalities which may be present. Dr. Schneider has mentioned pulmonary tuberculosis and heart disease as being possible indications for section. A preliminary flat film of the chest will readily assist in diagnosing these conditions.

The lateral abdomen film, with good soft-tissue technic, yields much information, such as placenta and fetal position and cephalometry. It is especially useful in these cases of placenta previa where the technic of Ude cannot be used, such as in breech presentation.

In those cases of hemorrhage where the diagnosis is doubtful, the technic of Ude is very helpful in evaluating a placenta previa. This technic is simple, and certainly turns a presumptive diagnosis into a positive diagnosis.

As to roentgen pelvimetry, the method used will depend upon the experience and training of the roentgenologist. There are a number of good methods in vogue. I have used the method of Torpin and Thoms with satisfactory results. It is a method that simplifies the other technic by giving on a single film the exact measurements of the superior strait, and the shape of the pelvic outlet in addition to the relative size of the presenting fetal head, as well as the interspinous diameter. The technic of roentgenocephalometry still presents its problem.

The interspinous measurements can be roughly determined by external mensuration. The roentgenologist, by experience, is capable of estimating the interspinous diameters. At present, the information given to the clinician states whether it is adequate or not. Perhaps in the near future we will be able to determine this diameter from a single film. I am interested in Dr. Torpin's statement that by using a factor of 0.9 to the diameters obtained by grid method, the actual interspinous diameter can be obtained.

From my own experience, I feel that when the anteroposterior diameter is 9 cm. or less, the obstetrician should be cautioned as to possible disproportion. I feel, as Dr. Schneider does, that this is the most important diameter obtained in roentgenpelvimetry. As to the transverse diameter, I feel that this is of less importance. The transverse diameter may be less than 11 cm., and yet no disproportion is noted. This is certainly seen in the anthropoid type of pelvis where the transverse diameter of the superior strait is less than the A. P. diameter. Some authorities feel that when the A. P. diameter and the transverse diameter are less than 23 cm., the possible indications for cesarean should be considered.

By the Torpin-Thoms technic one can tell by inspection the presence of deformities of the pelvis and rule out possible osseous changes as rickets, Paget's disease, old osteomyelitis, blood dyscrasias, and residuals of old trauma. Such information may be taken into consideration as an indication for cesarean.

Finally, I should like to discuss the possible dangers of irradiation to the mother and fetus by using the above-described technics. As I mentioned in the beginning of this discussion, this is one of the important phases where the roentgenologist can be of service to

the obstetrician and patient. Careful measurements of the amount of radiation reaching the vaginal vault in using these routine exposures. It must be emphasized, however, that these exposures were taken from different positions and only one exposure in the "sitting" position was made for roentgenpelvimetry. Certainly this amount of irradiation is not sufficient to affect the fetus in any manner. However, the danger of exposure presents itself not to the fetus, but to the maternal skin. This is especially seen in the superior-inferior position where the target skin distance is relatively short. If one uses the standard technic adopted for the Torpin-Thoms pelvimetry, the amount of radiation reaching the maternal skin may approximate a suberythema dose.

For this reason I would like to emphasize the possible dangers of a repeated pelvic measurement within a short time. The technician making this examination should be trained, and in no case allowed to repeat the exposure without permission of the roentgenologist. In order to decrease this possibility, I routinely use an addition of 1 mm. Al. filter which decreases the intensity of the caustic rays to about one half. Although, the TFD is recommended at 30 to 32 inches, I use 36 inches, thereby decreasing the intensity of radiation according to the inverse square law. The latter maneuver does not affect the measurements obtained appreciably. Recently a high intensity screen has been developed which decreases the radiation required by one-half. I have used this screen with success in pelvimetry. Therefore, by special attention to these factors the intensity of irradiation is decreased to less than one-fourth of the acceptable safety factors, making it possible to make repeated studies if necessary.

Dr. Torpin has had no case of complication following irradiation and neither have I seen such case. However, with such a potent weapon, its indiscriminate use should be prohibited, its use being limited to the technician supervised by a physician who is acquainted with the possible dangers involved.

THE INTERNATIONAL COLLEGE OF SURGEONS

The International College of Surgeons, United States Chapter, will hold its fifteenth Annual Assembly and Convocation in Cleveland, Ohio, October 31, November 1, 2, 3, 1950 according to George M. Curtis, M.D., Columbus, Ohio, chairman of the assembly.

The program will include scientific sessions on subjects in the fields of general surgery; eye, ear, nose and throat surgery; gynecology and obstetrics; urology; and orthopedic, thoracic, plastic and neurologic surgery. In addition, an extensive technical and scientific exhibit will be presented by leading manufacturers of surgical instruments, x-ray apparatus, operating room and hospital equipment, pharmaceuticals and others, Dr. Curtis said. Special entertainment for the doctors' ladies has been planned.

Arnold S. Jackson, M.D., secretary of the United States Chapter, has reported from Madison, Wisconsin, that several hundred surgeons will be received as Associates and Fellows of the International College at the Convocation to be held in the Cleveland Public Auditorium, November 3.

All doctors of medicine interested in surgery and its advancement are invited to attend, and can obtain a program upon request to Arnold S. Jackson, M.D., Secretary, Jackson Clinic, Madison 4, Wisconsin. For hotel reservations, contact Committee on Hotels, International College of Surgeons, U. S. Chapter, 511 Terminal Bldg., Cleveland 13, Ohio.

THE DIAGNOSIS OF OBSTRUCTIVE LESIONS OF THE GASTROINTESTINAL TRACT OF THE NEWBORN INFANT

M. HINES ROBERTS, M.D.

Atlanta

Vomiting is the most commonly encountered symptom in the newborn period. It may be a warning of grave disease demanding immediate surgery, or may indicate the presence of some quite insignificant disturbance requiring no therapy. During the first 24 or 48 hours of life, unless one be ever alert, it is quite possible that obstructive lesions of the alimentary tract may be overlooked. Since the life of such an infant depends upon an early and accurate diagnosis, it seems worthwhile to review the means at our disposal for making such a diagnosis.

If vomiting persists for 12 hours after birth, it is wise to assume that an obstruction does exist, and to proceed at once with those studies which will unequivocally establish the presence or absence of such pathology. At this age, a careful review of all available data, including symptomatology, physical examination and x-ray studies will invariably reveal the presence of complete obstruction of the alimentary tract, if such pathology exists, and almost as certainly make the diagnosis of partial obstruction possible.

Chart 1 lists the causes of vomiting in the newborn period.

Group 1 includes those physiological and functional disturbances usually seen during the first 12 to 24 hours of the baby's life, and which may simulate obstructive lesions, especially in the esophagus or at the pylorus or duodenum.

In Groups 2 and 3 are enumerated those

From Henrietta Eggleston Hospital for Children and the Pediatric Department of Emory University School of Medicine, Atlanta.

Read before the Medical Association of Georgia in annual session, Macon, April 19, 1950.

CAUSES OF VOMITING IN THE NEWBORN

I

PHYSIOLOGICAL AND FUNCTIONAL DISTURBANCES

1. ASPIRATION OF AMNIOTIC FLUID AND VAGINAL SECRETIONS
2. GASTRIC DISTENTION—OVER FEEDING, SWALLOWING OF AIR
3. DIGESTIVE DISORDERS—ALLERGY

II

ORGANIC LESIONS OF ALIMENTARY TRACT

- | | |
|--|---------------------|
| 1. SPASM | 5. DIVERTICULUM |
| 2. STENOSIS | 6. DUPLICATION |
| 3. ATRESIA | 7. MALROTATION |
| 4. INTUSSUSCEPTION | 8. VOLVULUS |
| | 9. CONGENITAL BANDS |
| 10. HERNIATION—DIAPHRAGMATIC, INGUINAL, MESENTERIC, UMBILICAL | |
| 11. PERITONITIS—PARALYTIC ILEUS, ADHESIONS | |
| 12. IMPASSATED MECONIUM—OBSTRUCTION OF PANCREATIC AND/OR BILIARY TRACT | |

III

LESIONS PRODUCING PRESSURE UPON ALIMENTARY TRACT

- | | |
|--------------------|---------------------|
| 1. THYMUS | 4. CONGENITAL BANDS |
| 2. LYMPHATIC GLAND | 5. ADHESIONS |
| 3. TUMORS | |

IV

LESIONS REMOTE FROM GASTRO-INTESTINAL TRACT

- | | |
|---|---------------------|
| 1. CENTRAL NERVOUS SYSTEM—INJURY, ANOMALY, | |
| 2. RESPIRATORY TRACT— | INFECTION AND TUMOR |
| 3. CARDIO-VASCULAR SYSTEM—ANOMALY, EMBOLISM, THROMBOSIS | |
| 4. URINARY TRACT—ANOMALY, INFECTION | |
| 5. SYSTEMIC INFECTION—SEPSIS, TUBERCULOSIS | |
| 6. ENDOCRINE DISORDERS—PANCREAS, ADRENAL CORTEX | |

organic lesions within or without the alimentary tract which produce complete or partial obstruction, and about which this paper is primarily concerned.

Lesions remote from the gastrointestinal tract are shown in Group 4. These may occasionally suggest obstruction and make differential diagnosis necessary, although as a rule little difficulty is encountered in distinguishing the group from mechanically obstructive lesions.

A careful analysis of symptomatology may often give sufficient evidence for an almost certain diagnosis. A study of the gas pattern usually will confirm or disprove the presence of the suspected lesion.

Chart 2 indicates the important aspects of vomiting which must be evaluated. Often the level of an obstructive lesion may be accurately placed by the determination of the muscles of the gastrointestinal tract which produce the vomiting. For example,

DIAGNOSIS OF ATRESIA OF THE GASTRO INTESTINAL TRACT IN THE NEWBORN VOMITING	
THE MECHANICS OF VOMITING	
1	Esophageal Immediate overflow type with continuous drooling of saliva accompanied by respiratory difficulty
2	Pyloric & Duodenal Explosive type showing action of gastric musculature
3	Small or Large Gut Fecal type somewhat delayed in onset and preceded by distention from point of obstruction
THE CHARACTER OF THE VOMITUS	
1	Esophageal Mucus, sticky detritus & saliva with immediate return of whatever fluid has been swallowed
2	Pyloric or Duodenal above the Ampulla Gastric contents which are colorless, contain mucus and occasionally may be blood streaked
3	Duodenal below Ampulla May be greenish brown or often dark chocolate like in appearance
4	Small or Large Gut Fecal or Meconium-like material

DIAGNOSIS OF ATRESIA OF THE GASTRO INTESTINAL TRACT IN THE NEWBORN	
STOOLS	
Atresias above the Ampulla yield normal meconium stools	
Atresias below the Ampulla & Duodenum yield stools which are greyish or white and mucoid in nature	
Faber's Test for squamous epithelial cells swallowed with the amniotic fluid is negative	
GAS PATTERN AS INDICATED BY X RAY	
Serial studies of the G.I. tract from birth indicate that gas has reached the sigmoid and rectum by 7 to 10 hours	
Atresia of the esophagus usually gives a normal pattern, since there is generally a fistula between the pulmonary tract and esophagus. Opaque substance may reach stomach and intestines by way of lungs	
Obstructions in the duodenum and high jejunum are quite characteristic showing a complete absence of gas below the distended point of obstruction. Malrotation and volvulus may simulate this pattern. Lesions lower down show evidence of obstruction but exact location is not so obvious.	

the explosive type vomiting of obstruction at the pylorus or in the duodenum is produced by the stomach musculature, and is entirely different in its mechanical aspects from the vomiting of esophageal obstruction. It also can usually be distinguished from obstructions lower in the small bowel, although the latter lesions may at times produce projectile vomiting.

The character of the vomitus is often very informative. Obstructive lesions above the ampulla of Vater produce a vomitus devoid of bile pigment. This vomitus is composed of gastric contents with mucus. It is usually colorless, although it may occasionally contain bright red blood; rarely dark blood. Atresia of the duodenum below the ampulla results in a vomitus which invariably contains bile pigments or their end products. This vomitus varies from a greenish-brown to a dark chocolate-like color. Occasionally there is a foul odor.

Obstructive lesions lower in the jejunum and ileum, as well as those in the large gut result in meconium or fecal vomitus.

Chart 3 emphasizes the value of careful notes on the type of stool. Atresias above the ampulla are accompanied by normal meconium stools. Those below the ampulla are usually grey or white and mucoid in nature. There appear to be some exceptions to this rule, especially in atresias of the third portion of the duodenum. Four infants in our series were so diagnosed, and

yet two of these patients passed what was reported as normal meconium. One of these infants was operated on successfully, and at operation was thought to have a complete atresia. The other came to autopsy. Instead of an atresia, actually a stenosis was found. The gut was patent, but only sufficient to admit the smallest probe and yet large enough to permit the passage of some bile.

Complete atresia below the ampulla will result in abnormal meconium. However, it must be remembered that an infant may exhibit all signs and symptoms of a functional atresia of the third portion of the duodenum, and yet be suffering with a stenosis which may result in normal meconium stools. Five patients in our series of obstructive lesions of the gastrointestinal tract in the newborn were proven by surgery or autopsy to have atresia of the jejunum or ileum. All had white or grey stools.

In order to obtain the maximum information from symptoms, accurate nursing notes are essential. A simple check on the record for a stool, without indicating its color or character, may delay the diagnosis of an atresia, and similarly, a bald statement that vomiting occurred without a description of the mechanics or character of the vomitus is of little help in diagnosis.

If from symptomatology an obstructive lesion is suspected, an x-ray of the gas pattern of the alimentary tract will make diagnosis absolute in all atresias, with ex-

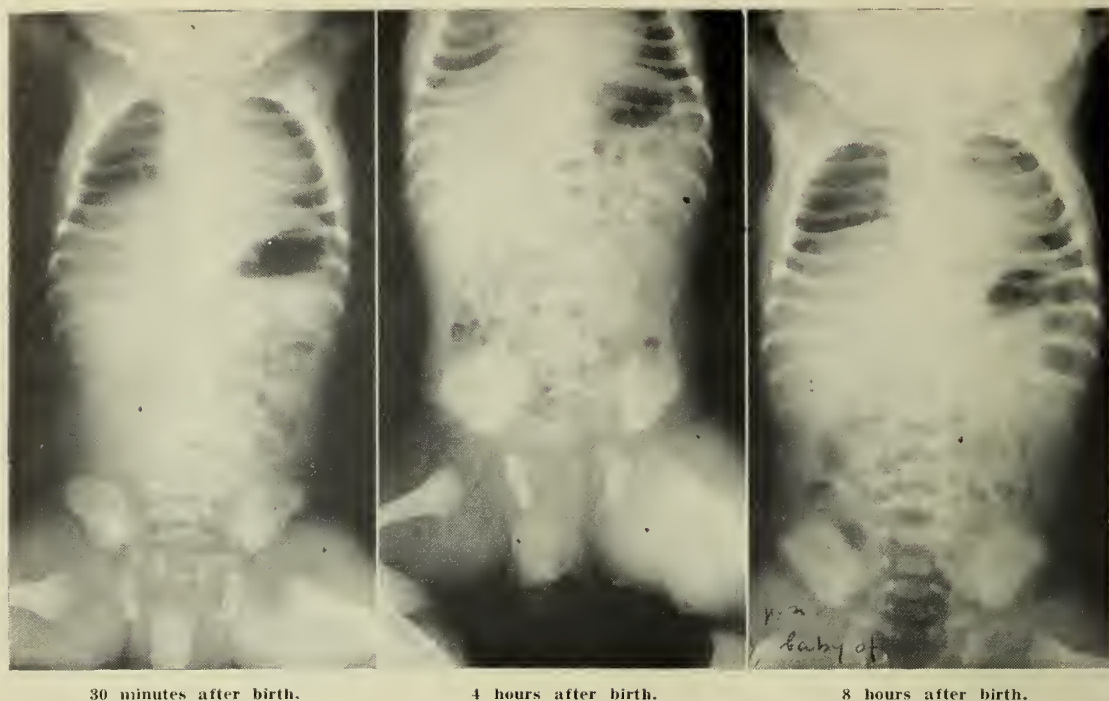


Fig. 1. Showing the progress of gas through the gastrointestinal tract in a normal infant from birth to eight hours of age.

ception of those in the esophagus. Since the latter lesions are usually associated with a fistula from the proximal end of the distal portion of the esophagus to the pulmonary tract, the stomach and intestines are soon filled with air derived from the lungs, hence the gas pattern of most of these infants is normal. Occasionally such a connection with the pulmonary tree does not exist, in which case no air is seen below the esophageal pouch.

Given the symptoms and signs of esophageal obstruction, which include the overflow type vomiting, cyanosis, respiratory difficulty and drooling, with a normal gas pattern, the diagnosis may be immediately established by the introduction of a catheter. In atresia of the esophagus, an obstruction is promptly encountered. The x-ray will reveal the catheter coiled in the upper segment of the esophagus. The use of lipiodol is unnecessary to confirm this diagnosis—indeed some surgeons object to its use. Barium should never be used, since some of this material invariably will overflow into

the trachea and set up a pneumonia in a child already handicapped by respiratory difficulty.

Physical examination, although not as informative as the studies already mentioned, may prove quite helpful.

The infant with esophageal atresia not only shows the characteristic vomiting with its persistent drooling, but almost invariably exhibits certain changes in the lung caused by the overflow of the contents of the esophageal pouch into the trachea, resulting in bronchial obstruction and/or infection. The physical findings, therefore, are those of atelectasis, or pneumonia most frequently involving the right upper lobe.

Obstruction at the pylorus or in the duodenum reveals the typical gastric peristaltic pattern invariably exhibited by such pathology, and in conjunction with explosive vomiting accurately indicates the level of the obstructive lesions.

Examination of the infant suffering with atresia of the jejunum, ileum or large bowel, reveals an ascending type of distention from

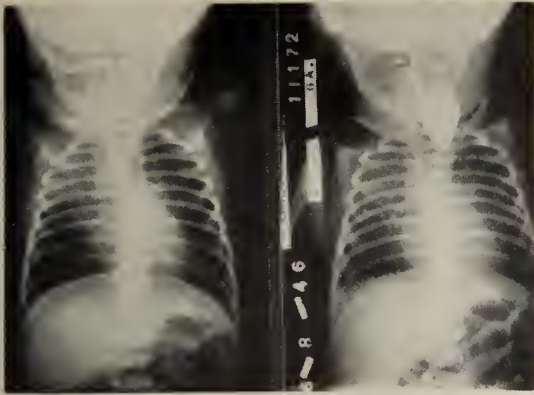


Fig. 2. Atresia of esophagus with tracheoesophageal fistula.

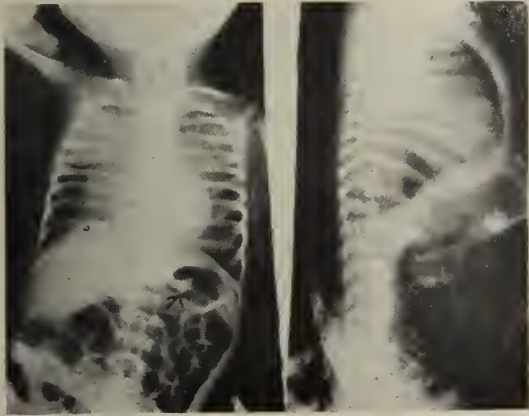


Fig. 3. Atresia of the esophagus with tracheoesophageal fistula, showing passage of lipiodol from esophagus to stomach by way of lung.



Fig. 4. Atresia of the esophagus without a tracheoesophageal fistula.

the point of obstruction, resulting in meconium vomitus. Barium studies of the large bowel in such lesions show what appears to be an atrophic colon, sigmoid and rectum due to non-function. Following successful anastomosis, however, it is seen that this gut functions normally.

In studying a newborn infant exhibiting symptoms of alimentary tract obstruction during the first 12 hours of life, it is essential that the gas pattern of normal infants during this critical period be known. Serial studies of the gastrointestinal tract made during the first 24 hours of life indicate rapid passage of air from mouth to anus.

Figure 1 shows the gas patterns of a normal infant taken at the ages of 30 minutes, four hours, and eight hours, respectively. It will be seen that at eight hours the gas is already well down in the large

bowel, distending the sigmoid and rectum. Therefore, even at this early age, if x-ray studies show obstruction in duodenum or jejunum, one may be sure this indicates pathology and not normal progress of gas through the alimentary tract.

Figure 2 reveals in the x-ray on the left the gas pattern of the commonly encountered atresia of the esophagus, with the accompanying tracheoesophageal fistula; note gas in the stomach and small bowel. On the right is shown the catheter and lipiodol in the blind esophageal pouch.

Figure 3 brings out the point that not only can gas enter the gastrointestinal tract by way of the lung through the tracheoesophageal fistula, but also lipiodol placed in the blind pouch may follow the same route and be observed in the stomach and intestines. Shown in figure 3 also are the characteristic pulmonary changes almost universally encountered in these infants. Figure 4 exhibits the much more rarely encountered atresia of the esophagus, in which no tracheoesophageal fistula exists—hence

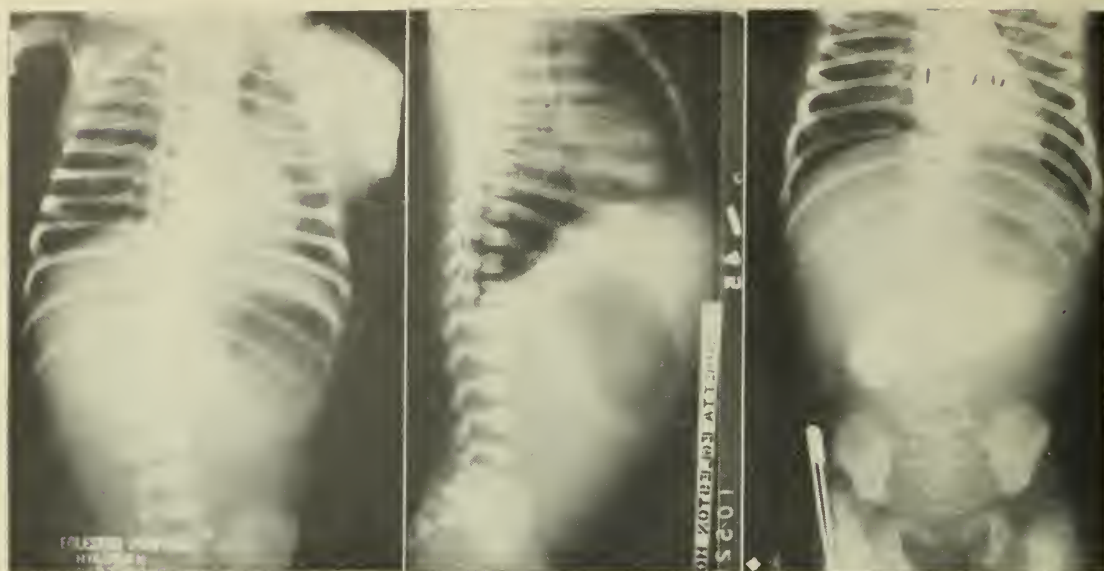


Fig. 5. Duodenal atresia, showing obstruction indicated by gas pattern and by barium.

no gas is seen in the alimentary tract below the blind pouch indicated by the catheter. Typical pulmonary changes can be detected in this x-ray also.

Figure 5 reveals in the first two x-rays the gas pattern of an atresia of the duodenum as demonstrated in the anteroposterior and lateral views. In the picture on the right the obstruction is shown even more clearly after the ingestion of barium. The use of the opaque substance, however, is unnecessary for diagnosis. The symptomatology in this case was classical; projectile vomiting of dark brownish material, accompanied by the passage of grayish-white stools. A duodenojejunostomy resulted in complete recovery.

Figure 6 exemplifies that not uncommon phenomenon of multiple obstructive lesions of the alimentary tract. The symptomatology suggested the diagnosis of atresia of the esophagus, which was confirmed by the obstruction encountered when it was attempted to pass a catheter into the stomach. The gas pattern indicated obstruction in the duodenum and the presence of a tracheoesophageal fistula, both of which were proven at autopsy. And finally the physical examination revealed an imperforate anus, which

at postmortem was found to be accompanied by an absence of rectum.

In figure 7 is seen the gas pattern of an infant suffering with malrotation and volvulus. The symptomatology encountered in these patients is variable in time of onset and character. This infant vomited occasionally during the first two weeks of life, then suddenly exhibited signs of obstruction high in the small bowel accompanied by a large hemorrhage from the bowel. As will be noted, the gas pattern of this baby is quite similar to those seen in patients with atresia of the duodenum.

Figure 8 demonstrates the gas pattern and the appearance of ingested barium in an infant suffering with atresia of the jejunum. This infant vomited dark greenish-brown foul material occasionally in a projectile fashion. The stools were white and mucoid in nature. The gas pattern placed the level of obstruction in the small bowel below the duodenum, but did not reveal its exact location, although we felt it was definitely in the jejunum. A jejunojejunostomy resulted in an uneventful recovery.

Figure 9 demonstrates the gas pattern of an infant with an atresia of the ileum. The symptomatology placed the lesion below



Fig. 6. Multiple anomalies of the gastrointestinal tract; namely, atresia of the esophagus, duodenum and rectum.



Fig. 7. The gas pattern of an infant with malrotation of the gut and resulting volvulus.

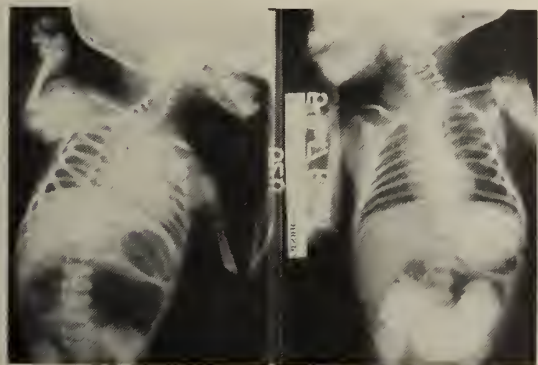


Fig. 8. Atresia of jejunum as indicated by gas pattern and barium.



Fig. 9. On the right the gas pattern of an atresia of the ileum. On the left, the atrophic condition of the large bowel is indicated by a barium enema.

the duodenum. The gas pattern indicated small gut obstruction. Not until operation were we certain that the lesion was in the ileum. On the left is the x-ray of a barium enema, in this case demonstrating the apparent atrophic state of the large bowel due to disuse. After anastomosis this portion of the gut functioned normally.

Figure 10 is the study of the gas pattern of an infant with an imperforate anus. The x-rays were made with the child held upside down in order that the gas might fill the

most caudal section of the lower bowel, thus making possible a more accurate evaluation of the extent of the anomaly, and serving as an aid to the surgeon in determining his approach. The metallic substance placed over the anus shows that the distance from the distended rectum is less than 2 cm., and the obstruction can be relieved from below.

The diagnosis of partial obstruction in the alimentary tract of the newborn is not so clear cut, nor so urgent. Congenital strictures or stenoses may involve any portion of

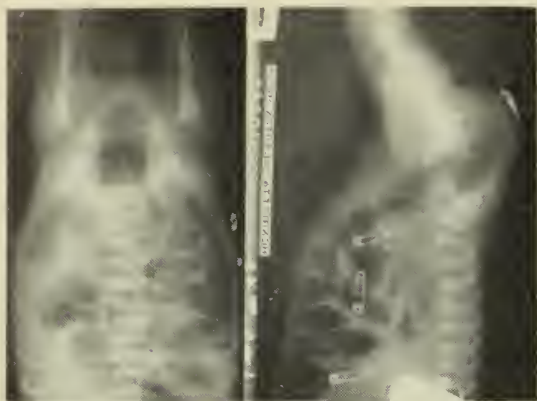


Fig. 10. Gas pattern of infant with imperforate anus and atresia of rectum.

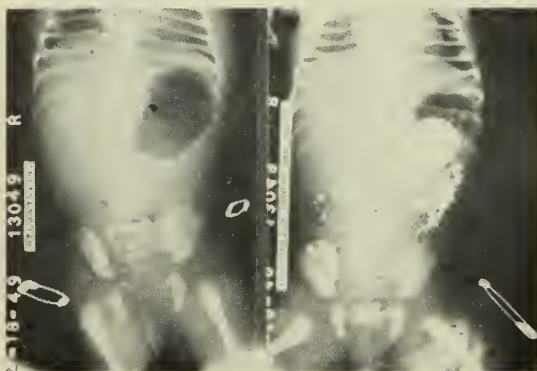


Fig. 11. Congenital stricture of first portion of duodenum, as indicated by gas pattern and barium.

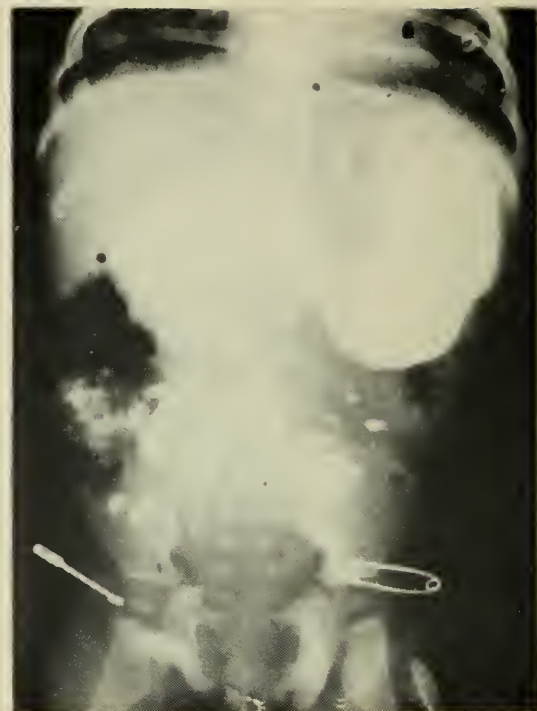


Fig. 12. Congenital stricture of third portion of duodenum in nine months old infant.

the tract. Their symptomatology in general is similar to the atresias. The stools, though frequently constipated, are otherwise normal. The mechanics of vomiting varies chiefly as to extent and degree. The character of the vomitus is determined mainly by the presence or absence of bile. The end products of bile and old blood which are seen in atresias of the duodenum below the ampulla are not present in the vomitus of an infant whose duodenum is only partially obstructed. Fecal or meconium vomiting does not occur.

It is well to remember that hypertrophic pyloric stenosis is not the only obstructive lesion which may exist in this region. Atresia and stricture have been observed, with projectile vomiting occurring immediately after birth, rather than one week to three weeks after birth, as is usually seen in true hypertrophic stenosis.

Figure 11 shows on the left the gas pattern of an infant with a congenital stricture of the first portion of the duodenum. This baby exhibited projectile vomiting from birth; the vomitus was clear, the meconium normal. The x-ray on the right indicates the progress the barium meal has made at the end of six hours. This obstruction was relieved by a gastrojejunostomy. At operation no evidence of a pyloric tumor was found.

Figure 12 demonstrates a congenital stricture of the third portion of the duodenum in a nine months old infant. This baby had exhibited projectile vomiting once or twice daily since birth. Stools had been rather constipated. When solid food was added to the dietary, vomiting was aggravated. A duodenojejunostomy relieved this partial obstruction.

The diagnosis of the rarer lesions producing complete or partial obstruction of the alimentary tract, such as duplication, malrotation, volvulus, congenital bands, herniation, etc., can not usually be made

with certainty. The symptomatology is variable as to time of onset, and is capricious in its manifestations. Periods of obstruction or partial obstruction may be relieved by days when the bowel appears to function normally. Malrotation, with resulting volvulus, exhibits a gas pattern quite similar to that of duodenal atresias, yet the important symptom may be massive hemorrhage from the bowel, which frequently masks completely the presence of obstruction. Duplication of the gut may not become evident until many years after birth, when growth of the cyst-like mass encroaches on the bowel, producing symptoms of obstruction.

In such lesions as those mentioned, one must usually be content with a functional diagnosis, noticing the presence of a complete or partial obstruction at a certain level, and awaiting the surgeon's exploration to determine etiology.

In conclusion, it should be emphasized that, although vomiting and gagging in the first hours of life may be physiologic, it also may warn of pathology incompatible with life. Careful evaluation of signs and symptoms, especially the mechanics of vomiting, and the character of stools, with an x-ray of the gas pattern, and finally, if indicated, a catheter to determine the patency of the esophagus, are the few simple procedures which will invariably give the diagnosis in those cases requiring immediate surgical intervention. Again it should be emphasized that the presence of obstructive lesions demanding immediate surgery can be promptly and certainly demonstrated by the following simple studies and procedures:

1. Evaluation of symptomatology.
 - a. Mechanics of vomiting.
 - b. Character of vomitus.
 - c. Character of stools.
2. X-ray study of gas pattern.
3. Passage of catheter into stomach.

DIAGNOSIS AND EARLY MANAGEMENT OF ACUTE POLIOMYELITIS

MARVIN L. DAVIS, M.D.

Atlanta

Two hundred and ninety-two cases of acute poliomyelitis were admitted to the Contagious Unit of Grady Hospital during the years 1948 and 1949. This group represented 64 per cent of the poliomyelitis patients reported in Georgia during that period. An analysis of the cases in this series was done to emphasize the important aspects of diagnosis of poliomyelitis and to review the principles of therapy that were followed at Grady Hospital in the early management of this disease.

In neither of the two years did the number of cases reach epidemic proportions. A review of the annual incidence of poliomyelitis in Georgia during the period of 1939-1949 (Table 1) reveals only one epidemic year, 1941.

TABLE 1
*Annual Incidence of Poliomyelitis
Georgia, 1939-49*

Year	Cases/100,000 Population
1939	3.2
1940	1.0
1941	25.1
1942	1.6
1943	0.9
1944	3.3
1945	4.1
1946	5.3
1947	2.8
1948	6.7
1949	7.2

Diagnosis

The diagnosis of poliomyelitis in this group of patients was usually based on several factors: epidemiology, history, findings at physical examination and spinal fluid changes. The diagnosis was confirmed by autopsy in one case. The epidemiological aspects considered were the seasonal occurrence of the disease, age, sex and race of the patients. These factors were in keeping

From the Department of Pediatrics, Emory University School of Medicine, Atlanta.

Read before the Medical Association of Georgia in annual session, Macon, April 19, 1950.

POLIOMYELITIS AT GRADY HOSPITAL, 1948-49

SEASONAL INCIDENCE (292 CASES)

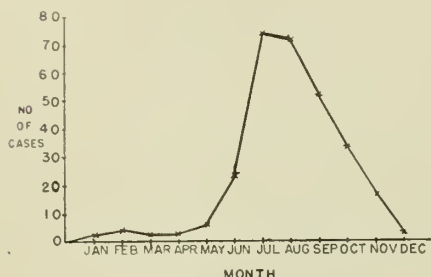


Fig. 1. Seasonal incidence.

POLIOMYELITIS AT GRADY HOSPITAL, 1948-49

AGE INCIDENCE (292 CASES)

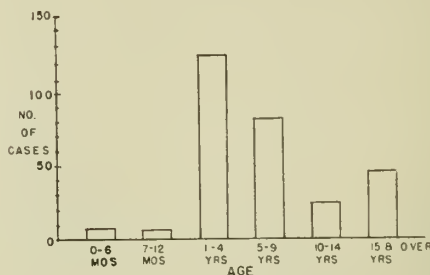


Fig. 2. Age incidence.

with the findings reported in other large series. However, it seems significant that the disease occurred more often in white persons than in Negroes.

Seasonal incidence. A seasonal incidence curve (Fig. 1) shows that the peak was reached during the months of July and August with a slightly earlier rise than is seen in cooler climates. While poliomyelitis is known to occur more frequently in summer months, the season in Georgia extends over a longer period.

Age: Nearly 50 per cent of this group were between the ages of one and four years (Fig. 2). The youngest patient was three months and the oldest was 32 years. Sixteen per cent of the cases were over 15 years of age. Occurrence of poliomyelitis in infants under one year of age was infrequent. While a comparison of the results of this study with earlier figures on poliomyelitis in Georgia was not available, studies 1, 2 and 3, elsewhere have demonstrated a relative shift of age selection of poliomyelitis from the 0-4 year group to the 5-9 year group during the past 25 years. The significance of this shift is unknown but is thought to represent a failure to acquire natural immunity at an early age.

Sex and race: No significant disproportion of distribution between sexes was noted (Fig. 3). Other large surveys have likewise revealed no predilection of poliomyelitis for either sex. A review of the racial inci-

dence (Fig. 3) showed that poliomyelitis occurred six times more commonly in white persons than in Negroes while the population ratio of white persons to Negroes in Georgia is only 2:1.

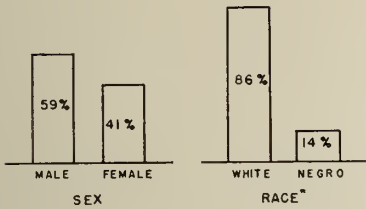
Presenting complaints: Fever was the complaint most frequently presented at admission by these patients (Fig. 4). Complaints of muscle weakness or paralysis, malaise, headache, stiff neck and extremity pains were encountered in that order. Symptoms more specifically suggestive of poliomyelitis included voice changes, difficulty in swallowing, urinary retention and respiratory difficulty. Actually, the complaints early in the disease are nonspecific and it is only later in the illness, when more specific findings become manifest, that the correct diagnosis suggests itself.

Physical findings: Stiff neck and weakness of a lower extremity were by far the most common findings on physical examination (Fig. 5). Next most frequently found were stiff back, weakness of an upper extremity, and presence of a Kernig or Brudzinski reflex (or both). A much lower incidence of such findings as muscular spasm, palatal paralysis, bladder distention, facial asymmetry and respiratory paralysis was revealed.

Type of involvement: Sixty-two per cent of these cases had spinal cord involvement only, while 23 per cent had bulbar (or bulbo-spinal) involvement and 15 per cent

POLIOMYELITIS AT GRADY HOSPITAL, 1948-49

SEX AND RACE INCIDENCE (292 CASES)



*RATIO WHITE-NEGRO IN POPULATION OF GEORGIA = 2:1

Fig. 3. Sex and race incidence.

POLIOMYELITIS AT GRADY HOSPITAL, 1948-49

INCIDENCE OF PRESENTING COMPLAINTS
(% OF 292 CASES)

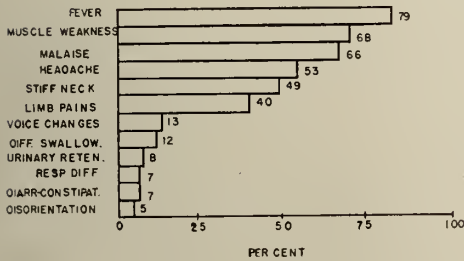


Fig. 4. Incidence of presenting complaints.

POLIOMYELITIS AT GRADY HOSPITAL, 1948-49

INCIDENCE OF PHYSICAL FINDINGS
(% OF 292 CASES)

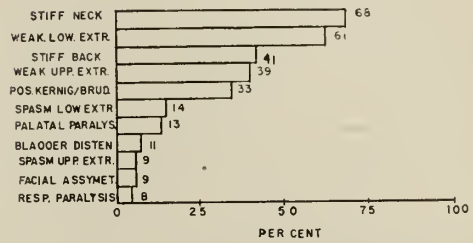


Fig. 5. Incidence of physical findings.

POLIOMYELITIS AT GRADY HOSPITAL, 1948-49

TYPE OF INVOLVEMENT (292 CASES)

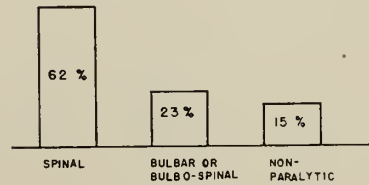


Fig. 6. Type of involvement.

were nonparalytic (Fig. 6). The differentiation is important because the prognosis and management often depend on the type of anatomic involvement. Frequent muscle examination should be done in the acute stage because of the rapidity with which progression may occur.

Spinal fluid changes: In 52 per cent of the cases examination of the spinal fluid revealed a cell count of 16 to 100; 42 per cent showed 66 to 90 per cent lymphocytes on differential count; and 48 per cent had a positive Pandy test. These findings are consistent with the spinal fluid changes usually reported in other surveys, namely, moderate pleocytosis, lymphocytic predominance on differential count (except early in the disease) and elevation of the protein. The relative ease of performing a lumbar puncture and the ready availability of facilities for spinal fluid examination should increase the number of cases in which the diagnosis could

be established by the referring physician.

Differential Diagnosis

Many diseases are confused with poliomyelitis and a large number of patients were referred to Grady Hospital as poliomyelitis suspects who were found to have other diseases. Some diseases occurred with enough frequency to be important in differential diagnosis.

Guillain-Barré syndrome,⁴ or acute infectious polyneuritis, was encountered in several cases admitted as poliomyelitis suspects. The essential points in the diagnosis of this disease are: symmetrical distribution of paralysis, frequent occurrence of sensory loss, minimum or absence of muscle tightness and pain, and usually a normal spinal fluid cell count with a definitely elevated protein.

Tick paralysis,⁵ which occurs during the same season as poliomyelitis, was occasionally a source of confusion. The important

differentiating points are the absence of fever, a normal spinal fluid, absence of muscle spasm, little or no stiffness of neck or back, usually diffuse muscle weakness and ascending symmetrical involvement, and finding an engorged tick on the patient. With trauma there may be localized tenderness, and neurologic examination and spinal fluid are normal. *Lymphocytic choriomeningitis*, *mumps meningo-encephalitis*, and *arthropod-borne encephalitis* may be distinguished from poliomyelitis by serologic tests.⁶ In *tuberculous meningitis* a high spinal fluid protein and a decreased sugar are of value in differentiating it from poliomyelitis. *Bacterial meningitis* is usually accompanied by a high fever, convulsions and in many cases the responsible organism can be identified in the spinal fluid. The recently discovered Coxsachie virus⁷ which appears to be responsible for an illness simulating nonparalytic poliomyelitis, is impossible to differentiate without laboratory procedures.

Early Management

Since there is no specific agent available for the treatment of poliomyelitis^{8, 9} the essential aims of management are general supportive measures and the anticipation and handling of any complications that may develop. Supportive measures include the relief of pain and the alleviation of physical and mental discomfort, immobilization by complete bed rest, maintenance of adequate nutrition, and the use of chemotherapy and antibiotics for the prevention and treatment of secondary infections.

Management of *nonparalytic* patients consisted of the application of hot moist packs to painful or spastic muscle groups. No significant complications developed.

Paralytic patients were treated with hot packs, and by positioning of affected parts of the body to prevent pain and the development of deformities. However, in this group many special problems arose which required

extreme care. Most important among these was *respiratory failure*, which may be produced by paralysis of muscles of respiration, respiratory center involvement, inadequate oxygen and carbon dioxide exchange due to pulmonary edema or angiospasm, and obstruction to the respiratory passageway. The provision of artificial respiration and maintenance of a patent airway are of paramount importance in the management of this complication. Frequent suctioning must be performed to prevent accumulation of secretions resulting from pharyngeal and palatal paralysis. Elevation of the lower extremities aids in postural drainage of secretions from the pulmonary tree. Frequent turning of the patient forestalls the collection of secretions in the dependent portions of the lungs and the occurrence of pneumonia. Vomiting and aspiration are grave complications and are frequently responsible for atelectasis in a patient who already has very little respiratory reserve. Bronchoscopy is a useful procedure and at times may be a life saving measure where atelectasis has occurred following aspiration.

While the advisability of tracheotomy at times may be debatable,¹⁰ it was resorted to in those instances where a patent airway could not be otherwise maintained. Pulmonary edema has been shown to be a major factor in poor oxygen and carbon dioxide exchange. Masland et al.¹¹ have described very satisfactory results from the use of positive pressure in the prevention and treatment of pulmonary edema.

An *artificial respirator* was necessary in those cases where patients could no longer achieve adequate respiration by their own power. In all cases where there existed any suspicion of respiratory failure a respirator was readied and placed at the bedside. Where respiratory failure was primarily the result of respiratory center involvement, the respirator was not used except as a last des-

perate gesture. These patients usually do not adjust well to the machine and in some instances are probably harmed by breathing against it and by increased aspiration of mucous. Once the patient is placed in the respirator, careful and constant nursing care is necessary. Most patients showed considerable improvement, and difficulty in adjustment to the machine was encountered in only a few instances. Duration of stay in the respirator varied from 48 hours to over nine months.

Where there was any evidence of respiratory failure, continuous oxygen was supplied by nasal catheter. Oximeter readings¹² of the oxygen saturation of the blood were not available, and the unreliability of determining the degree of cerebral anoxia on the basis of clinical cyanosis necessitated the use of continuous oxygen therapy.

Tube feeding was carried out in many respirator cases and in those patients with swallowing difficulty. This procedure supplemented the administration of parenteral fluids and was discontinued when oral feedings could be safely resumed. The feeding used was a milk formula of high caloric, high vitamin, and high protein content.

Expert nursing care is absolutely essential for the survival of respiratory cases and it emphasizes the need for an experienced team of doctors and nurses. Frequent suctioning of pharyngeal secretions is necessary and constant observation and attendance are mandatory. Aspiration of mucous or vomitus into the lungs constitutes an ever-present threat to the life of the patient, and its occurrence may result in immediate death. The attending nurse is charged with provision of moral support of her patient.

Circulatory center involvement, which occurred in a few patients, was manifested by clinical circulatory collapse. This condition can progress very rapidly and severe involvement carries a grave prognosis.

Oxygen administration anti-shock therapy, central nervous system stimulants and expert nursing care are essential in the management of these patients.

Encephalitic symptoms occurred in 22 cases. Since it has been postulated that much of the encephalitic picture stems from cerebral anoxia, nasal oxygen was usually administered.

Urinary retention was a special problem that was encountered frequently. Rarely was incontinence noted. Subcutaneous administration of 2-10 mg. of furmethide^{13 14} (a bladder specific parasympatheticomimetic) resulted in almost immediate emptying of the bladder in most cases. Intermittent and indwelling catheterization was used on several occasions. Antibiotics and chemotherapy were valuable where catheterization was complicated by urinary tract infection.

Summary

1. Two hundred and ninety-two cases of acute poliomyelitis admitted to Grady Hospital during 1948 and 1949 were surveyed.
2. There were 11 deaths, making an overall mortality rate of 4 per cent.
3. The clinical and laboratory findings were consistent with those of other large series.
4. The disease occurred three times more frequently in white persons than in Negroes.
5. The essential aims of management were general supportive measures plus the anticipation, recognition and handling of complications that developed. Respiratory failure was the most important complication encountered. Maintaining a patent airway, continuous oxygen therapy, use of an artificial respirator and expert nursing care were vital factors in the successful management of this complication.

BIBLIOGRAPHY

1. Howe, Howard A.: Epidemiology of Poliomyelitis, *Am. J. Med.* 6:537 (May) 1949.
2. Gilliam, A. G.: Changes in Age Selection of Fatal Poliomyelitis, *Pub. Health Rep.* 63:677-684, 1948.

3. Dauer, C. C.: Trends in Age Distribution of Poliomyelitis in the United States, *Am. J. Hyg.* 48:133-146, 1948.
4. Ford, Frank R.: Diseases of the Nervous System in Infancy, Childhood and Adolescence, ed. 2. Springfield, Charles C. Thomas, 1946.
5. Ransmeier, John C.: Tick Paralysis in the Eastern United States, *J. Pediat.* 34:299 (March) 1949.
6. Horstmann, Dorothy M.: Clinical Aspects of Acute Poliomyelitis, *Am. J. Med.* 6:592 (May) 1949.
7. Melnick, J. L.; Lidiniso, N.; Kaplan, A. S., and Kraft, L. M.: Virus Pathogenic for Infant Mice, *J. Exper. Med.* 91:185, 1950.
8. Studies on the Chemotherapy of Virus Infections.
11. Failure of Darvisul (Phenosulfazole) to Affect the Course of Experimental and Clinical Poliomyelitis, *J. Pediat.* 35:444, 1949.
9. Bahlke, A. M., and Perkins, J. E.: Treatment of Preparalytic Poliomyelitis with Gamma Globulin, *J.A.M.A.* 129:1146, 1945.
10. Hill, L. F.: Tracheotomy in Bulbar Poliomyelitis, *J. Pediat.* 36:537 (April) 1950.
11. Masland, R. L.; Lawson, R. B., and Kelsey, W. M.: The Use of Positive Pressure as an Aide in the Handling of Respiratory Paralysis from Anterior Poliomyelitis, *J. Pediat.* 36:31 (Jan.) 1950.
12. Millikan, G. A.: The Oximeter, an Instrument for Measuring Continuously the Oxygen Saturation of Arterial Blood in Man, *Rev. Scient. Instruments* 13:434, 1942.
13. Boken, A. B.: Bulbar Poliomyelitis, *Am. J. Med.* 6:614 (May) 1949.
14. Lawson, R. B., and Gervery, F. K.: Paralysis of the Bladder in Poliomyelitis, *J.A.M.A.* 135:93, 1947.

REHABILITATION OF THE CRIPPLED CHILD

HARRIET E. GILLETTE, M.D.

Atlanta

A crippled child may be defined as an individual in whom there has been interference with the developmental processes, either before, during, or after birth. Such interference may be in the form of developmental defect, trauma, infection, toxins, degenerative process or other noxious mechanisms, many as yet unclassified. Damage may be in the sensory, motor, or visceral organs and may be so slight as to be merely annoying or so great as to cause total incapacity.

The scope of this paper includes only those children for whom it is good economics to expend a great deal of time, labor, and money in order to make them contributing members of society.

In setting up a program of rehabilitation our ultimate objective is to enable the individual to be self-sustaining and to lead a full life with both vocation and avocation. This should be kept in mind at the first and

all subsequent examinations, no matter what the age of the child. The immediate objective is to return the patient to a child's life, consistent with his handicap, as soon as possible.

The needs of the crippled child may be formulated in terms of the normal: (1) A means of communication to make known his immediate wants and to provide an avenue for education. The deaf child will require special sense training; the cerebral palsied and bulbar polio must learn control of muscles of speech and respiration; the aphasic, by dint of countless repetitions, must set up new engrams for each experience. (2) The ability to care for himself, to feed, dress, perform bathroom activities, apply braces, write, propel a wheel chair, and operate household appliances necessary for daily living. It is truly amazing how much can be done with feet, or with a stick held between the teeth, when arms and hands cannot function. (3) Education, as the basic step in reaching the ultimate objective of self-sustainment. Special teaching techniques may have to be used and various therapies integrated with the academic program, still the crippled child derives as much benefit and is as deserving as his normal sibling. Psychometric examination aids not only the teacher but everyone who comes in contact with the child. Special facilities for those children who cannot compete with a normal group would not only be good treatment, but sound economics as well. (4) Security, the feeling of belongingness, of being included in both the family circle and a community group. Too often the crippled child is placed on the fringe, and this is brought about by overprotection just as frequently as it is by neglect and misunderstanding. The youngster who is given a share in competition in a group of his own level obtains the necessary stimuli for growth and development which can be obtained in no other way. The

process of socialization is many-faceted and it cannot be accomplished except within a group which accepts the individual on his own merits. (5) Satisfaction of emotional needs—of loving and being loved—of accomplishment however small, of excelling in one particular activity. A freckle-faced boy has known the highest joys of success because he was the only one in the ward who could learn to wiggle his ears. Being given recognition and credit for this achievement has helped him to attempt somewhat more useful activities which previously were not deemed worth the effort. (6) Ambulation. This is the point about which parents are first concerned and the one at which therapy is usually first directed; and yet it is probably the last in importance. Should a child be forced to endure surgery, a great deal of therapy, or prolonged bed rest if there is no place to walk, or if his discipline is so bad that he is harmful to himself and to others, or if he cannot take care of himself after he gets there? The ability to walk is little appreciated by you and me; we would miss it if it were suddenly taken away but we could still carry on our daily activities in a fairly satisfactory manner from a wheel chair.

The luxurious act of walking implies a basic pattern of reciprocal innervation, equilibrium, and a specific alignment of bodily segments and muscle balance. The loss or failure of development of any one or more of these can be supplemented by muscle training, mechanical appliances, or surgery. Drugs may sometimes aid the basic therapies. It may be necessary to diminish the strength of a muscle or muscle group as well as to increase that of others in order to obtain proper relationships of a part. Economy and grace of movement should never be sacrificed at the expense of walking without proper bracing or crutches. The ability to change one's location is commensurate

with the need and effort required.

It would be exceedingly difficult to choose from the needs mentioned if only one of them could be satisfied. In a program of rehabilitation we attempt to meet all, and in this specialty, more than in any other, teamwork is of vast importance.

Accurate diagnosis, the setting of objectives, prescription of modalities, and follow-up to the time of employment is the responsibility of the physician. He will require consultation from the various fields of medical specialties and from allied services from time to time. Above all, he must maintain a broad view of the crippled child as an individual and not just a mass of muscles, nerves, visceral and sensory organs.

Physical therapy attempts by means of muscle training and strengthening, heat, massage, hydrotherapy, and electrotherapy, to train the motor elements to act in a more normal fashion. Alignment of bodily segments is worked for; first through accurate muscle testing, release of contractures, and strengthening of weakened groups. Training in balance, relaxation, use of prostheses, and a graceful gait are accomplished by various technics. Activities of daily living are an important part of the program and it is a proud day for the young paraplegic when the last block of his achievement chart is filled in.

The occupational therapy program may be divided into two phases; specific and non-specific. The first deals with muscle training, accomplished by the use of interesting activities which are suited to the development of involved muscle groups. Here again, mechanical appliances for the upper extremities may be necessary just as are braces for walking. Self-help skills such as feeding, dressing, putting on braces, grooming, etc., are taught. The second, non-specific phase of the program is use of handicrafts. This is not a random activity but is care-

fully planned and given on prescription. Here it is possible to work out behavior problems, conquer homesickness, and satisfy the creative urge. An aggressive youngster, inclined to bully his roommates, was given copper to beat into trays. The noise was deafening but ward troubles ceased.

Speech therapy begins with finding the reason for poor speech or for its complete absence. An audiometric examination is indicated in a large majority of speech disabilities, as the child who has never heard sounds of certain frequencies cannot be expected to reproduce them without special training. Lip reading and speech production with articulation and inflections closely approximating the normal, fit a deaf child for a useful life. The child who has a cleft palate and who has not had the benefit of surgical repair or application of a prosthesis and subsequent speech training, is crippled just as surely as is the one who has lost the use of an extremity; indeed, he will find it much more difficult to find employment. In the cerebral palsied, motivation is often the first step. This is followed by long training in relaxation and coordination of muscles of speech and respiration.

Music therapy has a wide application in developing a sense of rhythm leading to more graceful movement, in teaching relaxation, in motivation, and in socialization. With music's wide appeal, it may form the basic approach to an otherwise unresponsive child. Perfection in playing an instrument is not sought; rather the good which can be obtained from its use. A background of music promotes a better atmosphere in the ward and moods can be varied to fit the need.

Recreational therapy is not merely a filling in of leisure time; it accomplishes a very definite aim and is often given on prescription. Primarily, it is used to teach socialization, the art of good winning and

losing, and the feel of group living. Participation in a skit is part of everyone's growing up and this experience should be made available to the abnormal as well as to the so-called normal child. All therapies may be supplemented in recreation when basic muscle re-education has been achieved. For instance, a shoulder which is being strengthened in physical therapy receives an added workout in a game of shuffleboard or badminton and the cheers of the spectators add just that much more to speech therapy. A camping program in which treatments are minimized and just plain joy of living found, would be desirable for every handicapped child.

Education, while not considered a therapy, nevertheless must be an integral part of a well rounded program of rehabilitation. Special techniques may be employed as in sight saving rooms and materials for the blind, hearing aids and visual clues for the deaf, and means of concentrating the scattered intellectual functions and increasing the attention span of the cerebral palsied. A crippled child must learn the three R's in some way and he should be encouraged and given facilities to proceed to higher education within the limits of his handicap.

Lastly, our program includes vocational rehabilitation. Ideally, prevocational counselling should be begun at the age of 12, with aptitude tests and cognizance of observations of the various therapists who have worked with the child. By beginning at this age activities can be directed toward a more definite end. Then by the age of 16 years, if the child is ready, actual training can begin and valuable time will not have been lost in attaining the ultimate objective of a useful life.

To see a severely involved child graduate into a normal society, and incidentally into the great army of taxpayers, is indeed a gratifying experience. It is then realized

that he is only as crippled as his environment makes him.

TREATMENT OF FLAT FEET IN CHILDREN

J. H. KITE, M.D.

and

W. W. LOVELL, M.D.

Atlanta

A foot is usually considered flat if the longitudinal arch is flattened out. In addition to this the forefoot is abducted and the heel is everted. In the mild cases the arch may be only a little lower than normal, and the foot may be referred to as being in a "foot strain" position. In the severe flat foot cases the arch is completely obliterated and there is bulging in along the medial border of the foot, and the heel is turned out in an extreme valgus position.

A flat foot is a foot out of balance. In the infant there may be an imbalance of the muscles of the foot, so that the forefoot is pulled out in abduction more often than it is pulled inward in adduction. If the foot is pulled equally both ways, the foot is balanced and it will develop normally. If it is nearly always pulled out strongly and only occasionally pulled inward and this feebly, the foot will develop a fixed flat foot deformity.

Frequently the muscle imbalance is overlooked until the child is old enough to pull up and stand. In addition to the muscle imbalance there may be a slight anatomic variation in the shape and position of the bones which may produce a structural imbalance. The os calcis rolls out from under the talus and fails to give the normal support. This may be due in part to a relaxation of the muscles and ligaments. The object of treatment is to place the bones in the correct

anatomic position, and to strengthen the muscles and ligaments.

There is a wide variation in the severity of the deformities in flat feet. Some feet differ so slightly from normal, that they might improve spontaneously, others show only a mild flatfoot deformity which can be corrected by special shoes and manipulations, while still others present a very severe flat foot deformity, which might be called a "congenital flat foot" or "reverse clubfoot." This last group always requires casts and wedgings to correct the deformity. These cases also show a high percentage of recurrence after correction. There is a rare deformity in which the foot is fixed rigidly in a flat foot position by a bony bar or bridge between certain bones, as the calcaneonavicular bar. There is a still more difficult foot to treat, and that is one in which there is a congenital absence of parts of the foot or leg, as in congenital absence of the fibula.

Treatment

Shoes: The simplest form of treatment and the one most used is to prescribe some type of swung-in shoe. There are more than a dozen brands on the market, all being built along the same general lines. The forefoot is swung-in more than in the normal shoe, the heel is raised approximately one-eighth of an inch along the medial border and is usually carried forward a little on the medial side. The choice between the different brands of shoes is made on the amount the forefoot is swung-in, the amount of lift under the heel, whether this lift is under the anterior end of the os calcis only, or whether it goes all the way back to the rear of the heel, and on the stiffness and weight of the shoes. Broad and heavy shoes may be selected for boys and narrower and lighter shoes for girls. Some brands are so broad and stiff they are ill-fitting, while others are rather flimsy and give little support. Since feet differ in width and length

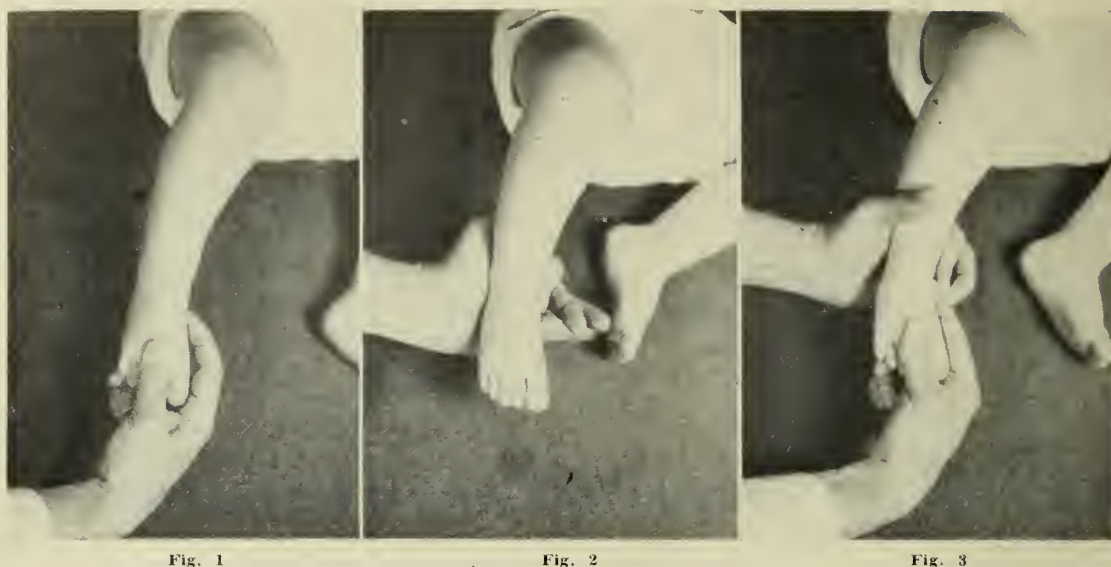


Fig. 1

Fig. 2

Fig. 3

Fig. 1. (Figs. 1-3 show the method recommended for manipulating a flat foot to restore an arch). The forefoot is grasped between the thumb and the flexed middle finger. This leaves the index finger free to make pressure on the tubercle of the navicular.

Fig. 2. A firm grip is made on the heel by the other hand. The thenar eminence presses against the heel, and turns it from eversion to inversion.

Fig. 3. The two grips are combined. The object is not to twist the foot inward on the leg, but to bend the foot in the middle. The forefoot and heel are carried in toward the midline of the body, while pressure is made away from the midline of the body on the arch. The forefoot is carried inward toward the other foot, and slightly downward, so as to restore an arch to the foot.

and severity of deformity, it is not wise to fit every foot with the same brand of shoe. It is necessary to know the brands available as well as to understand the problem that a given pair of feet present, to make the best choice of shoes.

A word of caution is inserted to condemn the indiscriminate use of the fluoroscope in fitting children's shoes in some retail stores. No attempt is made to control the length of the exposure as the mother goes from store to store shopping for shoes, or when she takes the child back at intervals to have the shoes checked. The accumulated dose of radiation over a number of years may cause skin damage or stunt the growth of the epiphysis. Shoes have been fitted for years by measurement and observation, and can still be fitted by this safe method. The fluoroscope is used more for an advertisement than it is for accurate scientific fitting.

In order to give good advice on subsequent visits, an accurate description of the

feet should be recorded. Photographs, foot prints, and x-rays are occasionally needed. For best results the doctor must develop an interest in flat feet, and follow a large series of cases. This report is based on the records of 1,880 children, many of whom have been followed through adolescence, and a few into adult life.

Manipulations: Shoes alone will correct only the very mild cases. The average case will respond more quickly if the parents "stretch" the feet. The flat foot needs to be placed in the opposite position. This the child does not do as it walks and plays, and this the shoe cannot do to any noticeable extent. Many cases will show no improvement unless the feet are stretched regularly and correctly. It is difficult to teach parents how to hold the foot to carry the foot over into a position which will help restore the balance. Mothers volunteer the information that they have been "working the feet," like some one showed her. This usually consists of rub-



Fig. 4



Fig. 5



Fig. 6

Fig. 4. The severe type of flat foot on the right may be referred to as a "congenital flat foot" or a "reverse clubfoot." This foot was treated for three and one-half months by casts, followed by swung-in shoes and exercises.

Fig. 5. The feet of patient in Fig. 4, eleven years later. She has normal feet and wears normal shoes, and has no foot trouble.

Fig. 6. "Outward rotation of legs and flat feet." The legs are rotated outward from the hips, and the feet are nearly always pulled out and up into calcaneovalgus position.

bing or wiggling the foot in an ineffectual manner. Sometimes the mother is slow to comprehend, and sometimes the doctor does not have a definite plan worked out by which the feet can be easily and effectively "stretched." If the treatment is not given correctly, the mother has wasted much time, and the child has not been helped. She should be taught maneuvers which have proved to be of value after a long trial.

The method we have recommended for a number of years is for the mother to grasp the forefoot on the flexed middle finger, leaving the index finger free to make pressure on the middle of the arch. (Fig. 1). This pressure is made on the tubercle of the navicular. The mother's other hand grasps the heel firmly and inverts it, and pushes it in toward the midline of the body. In a baby the heel may be grasped by the index finger and the palm at the base of the finger, but for the older child the thenar eminence is used. A firm grip is made on the heel as the heel is inverted. (Fig. 2). The two holds are combined and the forefoot and heel are

carried inward toward the midline of the body, while pressure is made outward on the medial side of the arch. (Fig. 3). A finger from the hand on the heel is made to press on the index finger which is pressing on the navicular. In this way firm pressure can be made comfortably on the middle of the foot, and an arch molded in the foot. This pressure is chiefly lateralward on the arch. The forefoot is carried in toward the midline of the body, and only slightly plantar flexed. It is not a turning in of the foot on the leg, but a bending of the foot in the middle. The foot is held in this position for about half a minute and released for a few seconds to rest the patient, and repeated. Five minutes are spent on the foot every night and morning, and occasionally during the day if there is an opportunity.

Exercises: When the child is old enough to cooperate it can be taught exercises. Briefly stated they are: (1) The patient is shown how to stand pigeon-toed and how to come up on the toes a given number of times, gradually increasing the number. (2)

Standing pigeon-toed, how to invert the foot and stand on the lateral border of the foot. (3) Sitting, the patient learns by following a finger at first, how to turn the foot down and in and up, to strengthen the muscles which invert the foot, and at the same time to stretch the heel cord. (4) When the heel cord is short a special exercise is taught. The patient stands a short distance from a wall in a pigeon-toed position, keeping the heels on the floor. The body is kept straight as the child leans forward until the chest touches the wall. By changing the distance from the wall, more or less pull is placed on the heel cord. There are numerous other exercises which cannot be discussed in detail here.

On the first visit the mother is taught to stretch the feet and the proper type of swung-in shoe is selected. On subsequent visits she is again checked on her stretching and taught how to do it better. More than half of the cases can be corrected by this treatment. If there is improvement this regimen is continued. If cooperation is poor or there is no improvement, footplates are used. The leather and rubber footplates sold in the stores are not as effective as the metal plates made by the brace maker. Some clinics use plates with flanges on the side of the plate to hold the foot on the plate. The plate recommended is made to fit the inner sole of the shoe, and the shoe holds the foot on the plate. This plate gives better support and can be worn with more comfort. The shoe should be fitted correctly without the footplate. Footplates are used when there is an anatomic imbalance of the bones of the foot, which have not been corrected by manipulations or exercises. The swung-in shoes and stretchings should be continued, and the patient instructed how to walk with the feet pointing straight forward. Footplates may be thought of as being like crutches, and are to be discontinued as soon

as the patient can get along without them.

Casts: For the feet which do not respond to the above treatment, and for those which are badly deformed, casts are needed to hold the feet in a still better corrected position. (Figs. 4 and 5). The cast will hold the foot in the corrected position day and night, for seven days in the week, and is many times more efficient than manual stretchings. If the foot is flexible and can be molded to the desired position when the cast is applied, the cast may be worn two or three weeks before it needs to be removed. If the foot is rigid and cannot be placed in the desired position the cast is "wedged" at weekly intervals, to gain more correction. Cast treatment is usually needed for two months or longer, until the foot begins to grow in the desired position. When the casts are removed, the stretchings, swung-in shoes and footplates are continued.

Outward rotation and flat feet: During the past few years there has been an increase in the frequency of another variety of flat-foot deformity. (Fig. 6). Some babies show from birth an external rotation of the legs and with the feet pulled out and up in an extreme calcaneovalgus position. The leg rolls out from the hip. These legs cannot be passively rotated inward much past the midline. In addition to being born this way, there are several factors which favor outward rotation. The legs roll outward when the baby sleeps on either its back or abdomen. When it sits flat in its crib or on the floor the legs must rotate outward. In many cases the outward rotation will disappear spontaneously, but we do see older children in whom the deformity persists and the feet are abducted fifty to sixty degrees from the midline.

The treatment for outward rotation is to have the mother grasp the knees and roll the legs inward as strongly as she can without causing discomfort. She holds them this



Fig. 7. If the outward rotation does not respond to inward rotation of the legs by the mother, the outward rotation can be corrected by wearing a bar across the shoes at night which rotates the legs inward. The bar can also be bent to invert the heels, and correct the flat foot deformity.

way for half a minute, and releases them and repeats it, spending five minutes on this manipulation twice a day. The associated flat feet are stretched as described above. If stretching is done regularly, most cases will show improvement in a month. If there is no improvement a bar is placed across the shoes, to be worn at night. (Fig. 7). The shoes can be set on the bar to gradually increase the amount the legs are rolled in. The bar is also of value in helping to correct the flat foot deformity. By bending the bar toward the body the feet are inverted. This bar is worn only at night, and usually corrects the outward rotation in a couple of months. (Fig. 8).

Operative treatment: There is seldom a need for operation on flat feet in children. The adolescent may need a heel cord lengthening, but this can usually be stretched suf-



Fig. 8. Feet of previous patient after using the bar for two months. Feet are still nicely corrected after two years.

ficiently by casts and wedgings. The congenital flat foot with the talus pointing straight down toward the sole of the foot and toward the medial side of the foot may need a foot stabilization or some bone operation when the patient is older. Those with calcaneonavicular bars or taleo-calcaneal bars may need the bar removed and the foot fused in a normal position. Flat foot associated with the absence of the fibula requires a brace, and maybe a fusion operation when older. Flat feet following poliomyelitis and spastic paralysis and similar conditions will not be discussed in this paper.

Summary

Flat foot deformity in children varies widely in severity. The mildest cases can be corrected by swung-in shoes. The more severe requires manipulations by the parents, exercises and instructions in walking and possibly footplates and plaster casts. Much can be accomplished when the treatment is begun early.

DISCUSSIONS

DR. A. M. JOHNSON (Valdosta): In his usual thorough manner Dr. Roberts has presented a scholarly discussion of alimentary obstruction. Dr. Roberts' plea for early diagnosis in these cases is of paramount importance. Delay in diagnosis is certain to raise the mortality rate many times that which can be attained under ideal management. Early and correct diagnosis in these cases is best made through studious observation and detailed study by the attending physician, himself, rather than the acceptance of findings of such utmost importance from a not too well trained, and

frequently over-worked nursing staff. The average floor nurse is frequently unfamiliar with the significance of the exact type of vomiting a baby might show. Also the type stool is usually recorded in a rather vague manner as to indicate its approximate color and consistency.

Such observations may not only be dangerous, but actually mis-leading to the diagnostician. Whenever called to see a baby who is reported to vomit for more than 12 hours let us take time, even to pull up a chair if necessary, to observe these infants being fed: stand around for awhile if necessary and observe the interval between eating and vomiting. Appraise the appearance of the abdomen as well as the appearance of the regurgitated fluid. The doctor's personal observation may speed surgical intervention, and in this manner lower our mortality rate in such cases. Observation, tedious and time consuming examination, and liberal use of the x-ray and fluoroscope make for an earlier and more accurate diagnosis of such grave conditions as might demand immediate surgery.

The ideas expressed by Dr. Gillette in her paper should be a challenge to us all—general practitioners, surgeons, otologists, orthopedists and physical therapists—to combine our efforts as a team to more completely place these children in the position of belonging and contributing to society.

Once these patients reach the goal of accomplishment whereby they can feel within themselves that they are contributing and belong to the great social group, then new vistas of life are open to them. When the little fellow with one hand learns to tie his shoes with this single hand he has something to be proud of, that is something the other fellows cannot do. He is just a little smarter than the fellow with two hands, and he is a little nearer the goal of belonging and contribution.

He is psychologically and physically better prepared to enter the big world of activity and compete with other fellows without the fears and self-consciousness that have kept him so long in his old world of doubts, fears and all the other things that go with the feeling of inferiority and just being different.

To attain the desired rehabilitation of these crippled children we must have as a foundation the cooperation of the family doctor, educational heads, the specialists in their different fields, and most of all a coordinating body whose burning interest in this work is their constant challenge.

In Dr. Gillette, I am sure we all have the feeling that, because of her zeal, there will be many more children in this state who will graduate into a normal society. Without her fine work their lives would be spent and end as dependent introverts who would never be able to face the world without this great work.

Rehabilitation cannot end with a well fitted brace or the cosmetically excellent repair of a harelip. The brace must be as inconspicuous as possible. The child must be taught and shown locomotion in the most graceful manner attainable for him. The child with the harelip or cleft palate must learn diction and to speak in the most euphonious manner possible.

Each case must be studied as an individual and objectives kept constantly in mind, lest the child become physically rehabilitated, yet remain emotionally and didactically crippled.

The first things we must know as doctors, whether we be the family doctor, the baby's doctor or the consulting orthopedist, are the distinguishing characteristics which differentiate the FLAT foot from the FAT foot. I am frank to admit that I see a large number of babies whose mothers say the foot is flat, but to me it is a perfectly normal fat foot. We must know which foot that freedom, development which comes from walking, and time will correct, and which foot

will need the aid of massage, special exercises and special swung-in shoes. It is most important that we not just send these patients to the shoe store with instructions to buy a given shoe, rather than have them fitted with the designated shoe and return to the doctor for determination of proper or improper fitting. If fitting is done in any other manner the shoe clerk soon will become the fountain head of knowledge to the mother who is concerned over her child who she thinks may have flat feet. We know, of course, that there are a great number of children wearing swung-in shoes who have not the slightest need for them, and would probably be much better off bare-foot.

I have heard many papers read on the subject, but I feel that the paper we have just heard by Drs. Kite and Lovell emphasizes the soundest principles of therapy on the matter. They have given us analysis of almost 2000 case findings, and the accumulated knowledge of many years experience in this branch of orthopedic care. I wish to thank Dr. Kite and Dr. Lovell for bringing us this timely and informative paper.

DR. ROBERT L. BENNETT (Warm Springs): I have been asked to discuss the last four papers.

As you know, they have rather a wide scope, ranging from obstructions of the alimentary canal in the newborn on to flat feet.

Dr. Roberts has very modestly said that his discussion is rather elementary, but he was prompted by the frequency with which obstructive lesions of the alimentary tract in the newborn are admitted to children's hospitals too late and frequently without definite diagnosis.

Unfortunately, neither by training nor experience am I qualified to discuss the problems outlined by Dr. Roberts, but I know of no better proof that you here must have gotten a great deal out of the discussion than to realize my own interest as I read his paper before this meeting and as I listened to him this morning. I am on more familiar ground with the subject when I discuss the last three papers.

Like Dr. Roberts in his discussion of early diagnosis of alimentary tract lesions, we who take care of crippled children are frequently disturbed when we have problems brought to us too late—certainly too late for maximum or optimum effective recovery.

At times the diagnosis is faulty, but I think much more frequently the fault lies in an incomplete realization that the physically handicapped child is not a specimen of a disease process but an individual with all the problems that are faced by normal children, accentuated by a specific physical functional handicap.

At Warm Springs, and at other similar centers I am sure, we have become increasingly aware that we are failing in certain cases to restore happy and effective living in a normal environment, not because we are not giving highly skilled attention to muscles and nerves and bones, but because we are forgetting that the child is an individual, in our interest in his disease. I think at last we are learning to evaluate the child in terms of the environment to which he must return.

As Dr. Gillette has so well brought out, we have learned that we must make this evaluation not when he has finished treatment at Warm Springs, but when he begins treatment at Warm Springs, so that this factor can be incorporated in our over-all program.

So that we will not run the risk of being criticized in that we might be over-protecting the child, I think Dr. Gillette brought out an extremely important point; namely, that the physically handicapped individual can be limited just as much by over-protection as he can by neglect.

I also was very much interested in Dr. Gillette's statement that unfortunately the patient and usually his parents use as a yardstick of recovery the ability

to walk again. I think any of you who have taken care of severely involved quadriplegics will realize that the victory of restoring some measure of functional capacity, even though the patient is confined to a wheelchair, is just as great a victory as it is to restore the ability to walk to a less involved patient.

I think we are becoming increasingly interested in restoring functional capacity to those individuals who have involvement of upper extremities, whereas in the past I think we spent much more emphasis on the lower extremities and the ability to walk.

Dr. Davis has given us a very nicely outlined and academic presentation of the incidence and diagnosis and treatment of patients at Grady Memorial Hospital, Atlanta. I think all of you are well aware that the earlier the diagnosis is made in acute anterior poliomyelitis, the less the mortality rate will be, because certainly an accurate early diagnosis will alert each one of us to the possibility of danger that is ever present in acute poliomyelitis.

PARENTS GET TIPS ON COPING WITH TELEVISION

"Don't ban television," parents of school-age children are advised by a child development consultant to *Today's Health*, published by the American Medical Association.

Although school surveys have sounded a danger signal about the effects of television on youngsters, it is here to stay and children must learn to live with it, says Elizabeth B. Hurlock, Ph.D., of Philadelphia.

"In recent months, surveys in several areas have shown that school grades drop when children have television sets in their homes—even when they regularly visit neighborhood homes to view the programs," Dr. Hurlock points out in the June issue of the magazine.

"The reports show that, on the average, children are spending as much time per day on television as on their lessons in school and at home," she says.

"Since the television problem is nationwide, I am offering some suggestions which, I hope, will help parents to cope successfully with this newest of problems in child training.

"1. Don't ban television. Instead of forbidding your child to watch television, apportion the time he may spend before the screen.

"2. Help your child to select programs that are worthy while and suitable for his age. Explain to him why you do not want him to see certain programs even if his friends watch them.

"3. Whenever possible, watch the programs with your child. Later, discuss with him their merits and faults. This will enable him to appreciate good programs more fully and to pass up the bad ones.

"4. Regard his television as a form of education as well as amusement. Let it be the starting point of discussions and reading related to the topics of the programs. Interest in music, art, current events, history, travel, sport and literature can be fostered.

"5. Encourage him to be interested in other forms of play, especially those that require outdoor exercise and demand teamwork with other children. Many children become television devotees because their parents unwittingly encourage it to keep them quiet and out of mischief.

"6. Watching television may be used as a reward. You may forbid your child to watch his accustomed programs when his behavior falls below expected standards or when his school grades take a plunge.

"7. Finally, remember that television is a new toy and its novelty will wear off. At present, owning a television set gives the child prestige in the eyes of his playmates. As more families acquire sets, the prestige value of ownership will wane. Likewise, as the novelty of watching the programs wears off, the child's preoccupation with it will lessen."

A.M.A. COUNCILS GIVE RECOMMENDATIONS FOR IMPROVING NUTRITION OF WORKERS

A three point program for improving nutrition of industrial workers is recommended to industry by the American Medical Association's Council on Foods and Nutrition and the Council on Industrial Health.

The program includes:

1. Use of plant facilities to make available foods well selected and prepared in the light of modern nutritional knowledge.
2. Support of nutrition research.
3. Campaigns to teach how to select a good diet.

These measures, the councils point out in an article in *Archives of Industrial Hygiene and Occupational Medicine*, published by the A.M.A., are superior to indiscriminate, mass administration of vitamins, a "practice which supports the commercial exploitation rather than the scientific, rational use of these important dietary factors."

Such mass administration of vitamins is unwise nutritionally because special vitamin preparations cannot take the place of valuable natural foods in achieving the completely satisfactory nutritive state, the councils say, adding:

"Concerns that are interested enough to consider spending large sums of money just to buy vitamin pills for their employees could render a valuable service to their industry and section of the country if they would use this money to support research on this question (nutritional deficiency) in their plants.

"Numerous suggestions can be offered for constructive action that business executives might take now in relation to this question pending the completion of the researches just mentioned.

"Industrial plants might assist more than they do in the educational work that must be done. They might be used for the display of posters and the distribution of literature that teach how to select a good diet. Organizations of employees could well be enlisted in a campaign to educate the individual workers in such matters and through them their wives could be encouraged to attend the various nutrition classes established in the communities throughout the land.

"The use in the plant of machines that dispense bottles of milk could be studied to determine its value for the plant in question. Through health department officials the management of any plant may readily secure advice and assistance in improving the general nutrition of workers."

AMERICAN BOARD OF OBSTETRICS AND GYNECOLOGY

The annual meeting of the board was held in Atlantic City, New Jersey, from May 21 to 27 inclusive, 1950, at which time 259 candidates were certified.

New bulletins, incorporating changes made at the recent meeting, are now ready for distribution. These changes include adoption of a special form to be designated as the "Appraisal of Incomplete Training Form" which will be forwarded to prospective applicants upon request. Numerous changes concerning graduate training in obstetrics and/or gynecology have also been adopted and will be of special interest to hospitals conducting residency programs as well as to prospective applicants to this board.

The next scheduled examination (Part I), written examination and review of case histories, for all candidates will be held in various cities of the United States and Canada on Friday, February 2, 1951. Application may be made until November 5, 1950. Application forms and bulletins are sent upon request made to: Paul Titus, M.D., Secretary, American Board of Obstetrics & Gynecology, 1015 Highland Building, Pittsburgh 6, Pa.

THE JOURNALOF THE
MEDICAL ASSOCIATION OF GEORGIAEDGAR D. SHANKS, M.D., Editor
478 Peachtree Street, N. E., Atlanta, Ga.

AUGUST, 1950

**SAN FRANCISCO MEETING OF THE
AMERICAN MEDICAL ASSOCIATION**

The San Francisco meeting was one of the most successful in the history of the American Medical Association. Held June 26-30, this meeting brought more than 25,000 persons in the first three days to San Francisco. By the end of the second day more than 9,300 physicians had registered; including guests, the total registration in this time was approximately 20,000, with two days of the meeting remaining. The largest previous registration of physicians in the Association's history was 15,667 in Atlantic City in 1947, at which time the Centennial meeting of the Association was held. The second largest registration was in Atlantic City in 1949, at which time 13,221 registered. In addition to members and Fellows of the Association, thousands of guests, such as members of the physicians' families, students, members of related professions, exhibitors and others made up the attendance.

Three major activities drew capacity attendances. The House of Delegates, which consists of 198 members, was apparently the subject of considerable new interest, as more and more members of the profession personally visited the House during its sessions to learn firsthand the actions taken by this democratic body. At every session the meeting room was filled with an alert and interested audience, whose attentiveness clearly indicated the interest of this group in the questions, resolutions and discussions offered by the members of the House.

Bishop Karl Morgan Block delivered the invocation at the opening session of the ninety-ninth meeting of the American Medical Association.

Included in some of the more important actions of the House were: Adoption of a report on displaced persons, authorization of a student American Medical Association, the Board of Trustees to initiate the organization of such a body; adoption of reports on medical education and medical practice in England, these to be published in early issues of *THE JOURNAL*; adoption of a modified report of the Committee on Hospitals and the Practice of Medicine which denounces systems whereby hospitals hire salaried physicians for medical care and bills the patients for this care; refusal to support the Association of Interns and Medical Students as presently constituted; support of the World

Medical Association; criticism of some hospitals which make membership in specialty boards a requisite for appointment or advancement, and approval of continuation of the National Education Campaign during 1951 with the firm of Whittaker and Baxter as directors of the campaign. At the same time the Board of Trustees was authorized to proceed with expansion of the A.M.A.'s Department of Public Relations and authority was granted to expand some of the special committees of the Council on Medical Service in anticipation of eventual discontinuance of the National Education Campaign.

The House also voted to include subscription to *THE JOURNAL* in membership dues and set dues for 1951 at \$25, the rate for 1950. The status of Fellowship was referred to an interim committee for study and reporting back to the House at the December 1950 meeting. It also chose New York City for the annual convention in 1953. Some idea of the activity of the House can be gained from the fact that in one day it transacted 74 pieces of business.

Among the officers elected by the House of Delegates were John W. Cline of San Francisco, Calif., President-Elect; R. B. Robins of Camden, Ark., Vice President; George F. Lull, Chicago, re-elected Secretary; J. J. Moore, Chicago, Treasurer (re-elected); F. F. Borzell, Philadelphia, Speaker of the House of Delegates (re-elected); James R. Reuling, Bayside, N. Y., Vice Speaker (re-elected), and Leonard Larson of Bismark, N. D., and Thomas P. Murphy of Meriden, Conn., to the Board of Trustees.

The scientific meetings contained papers of national and international significance. Not only were the papers and exhibits of great interest to the members of the medical profession—they were of outstanding public interest, if one can judge by the newspaper reporting. More than 300 papers were presented and 157 scientific exhibits offered to those interested in all phases of medical practice. The 1,492 authors and participants provided a total of 4,700 hours of lectures and demonstrations, truly an intensive postgraduate course for everyone. These scientific activities attest the interest and willingness of the participants to offer their knowledge for others. Particular credit is due the leadership of the Council on Scientific Assembly under the able chairmanship of Henry Viets. An indication of the extensiveness of the program can be obtained from the Convention number of *THE JOURNAL* (May 20).

The 304 technical exhibits were also well attended. In fact, many of the exhibitors said that to their knowledge their booths were visited by a more searching crowd than ever before in the history of the American Medical Association meetings. The 304 technical exhibits and 150 scientific exhibits covered more than 100,000 square feet.—*Editorial The Journal of the American Medical Association, July 8, 1950.*

PHYSICIANS FOR THE ARMED FORCES

By the time of the Pearl Harbor attack, in December 1941, some 11,000 civilian physicians had already left their homes and practices to furnish medical support to the expanding armed forces of this country. About one year later the number had increased to 42,000, all on a voluntary basis. At the same time several thousands of premedical and medical students were deferred from active military duty to colleges and universities throughout the country to complete their medical training with a view to being called to the armed forces later to serve as medical officers.

At this time there is evidence of probable need once again for additional medical officers to support our increasing defense establishment. Budgetary allowances have been increased for additional enlistments. The President of the United States has authorized an increase in these enlistments to augment the present troop strength and has stated that this authorization includes medical officers. There are many young physicians in the country whose services were deferred during the war in order that they might complete their medical education in either ASTP or V-12 programs, and many others have received their intern training in the hospitals of the armed forces.

The moral obligation that rests on them to serve the nation in this time of need is clear and unequivocal. While it is true that services of many other persons were deferred and that they received training in various specialties during the war, there were few groups other than physicians who could later utilize their training to advantage in civilian life.—*Editorial The Journal of the American Medical Association, July 22, 1950.*

NEW ULCER DRUG SEEN AS PREVENTIVE OF SURGERY

Most persons with serious disability from peptic ulcer can avoid surgery by receiving treatment with a new ulcer drug, banthine, early tests with one series of patients indicate.

The synthetic compound, which is taken in tablet form, blocks the impulses of the nervous system which stimulate overactivity and overacidity of the stomach. It is available only on prescription by a physician and must be taken under medical supervision.

Clinical trial of banthine in 100 peptic ulcer patients is described by Drs. Keith S. Grimson, C. Keith Lyons, and Robert J. Reeves of Duke University School of Medicine, Durham, N. C., in the *Journal of the American Medical Association*.

Of this group of patients, 62 were considered to have "conventional indications for surgery" before treatment with banthine was begun. Surgery was performed on five because of development of scar tissue or other special indica-

tions.

"Most of the patients were limiting their activity, restricting diet and using antacids before their trial of banthine," the doctors say.

"During treatment they were advised to discontinue use of antacids. With few exceptions, they were encouraged gradually to return to work and resume a normal diet during the first week or two of treatment.

"With the exception of two patients, the group has continued regular work or, if originally incapacitated, has returned to regular work. Pain of ulcer usually is relieved completely before healing can occur.

"It is much better that peptic ulcer when possible should be treated medically. It is our present opinion that banthine is a medical treatment better than that heretofore available and that need for surgery has and will decrease. Perhaps scar tissue can be avoided by prophylactic use of a simple treatment such as banthine. However, obstruction already present to a pronounced degree may lead to failure of banthine therapy and need for surgical intervention.

"Results with banthine used in lieu of rest, restriction of diet or antacids or other medications have been gratifying. Elimination of conventional restrictions and medical treatments necessary for study purposes, however, is not necessarily recommended as a good general practice. Occasionally because of delay of relief of pain or recurrence of pain banthine treatment has been supplemented."

REPORT OF DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION

(April 18, 1950)

Since the 1948 annual session of our Association we have suffered our greatest loss, in many years, in the field of medical legislation. Dr. Olin H. Weaver served this Association, the people of Georgia, the American Medical Association and the people of the United States wisely and well. He was faithful, punctual, industrious, endowed with unusual judgment, loyal, courageous and fearless. He was patient and tireless in sifting the wheat from the chaff, in innumerable long committee meetings and exhausting meetings of the House of Delegates. His conclusions were arrived at only when all the facts had been presented, after which he maintained his position regardless of all pressure groups. In his passing we have lost an able, true and great representative. In the deepest humility, we say:

"Well done thou good and faithful servant."

(Will the audience please rise in a moment of silent tribute?)

Dr. Minchew, Dr. Sharp and I attended all the meetings, both formal and informal, of the Ninety-Seventh Annual Session of the American Medical Association held in Chicago in June, 1948 and of the Interim Session held in

St. Louis in December, and also, in addition, many committee meetings. All the official proceedings have been published in *The Journal of the American Medical Association* and many abstracts of the most important matters discussed in our own Journal by Dr. Shanks, our Editor. Of course, the long discussions, many of them controversial and some of them before the entire membership of the House of Delegates, are too voluminous for publication in detail. Some idea of the very great interest taken in the proceedings by the constituent associations is the fact that of a total of 175 delegates 173 were in actual attendance.

The most important single fundamental action taken at the Chicago Session was the final adoption of the revised Constitution and By-Laws. This was the first complete revision in more than forty years. It was begun at the 1946 Session held in San Francisco. Nine completely re-written and revised drafts were submitted to the delegates for their study, criticisms and suggestions. Your delegation was represented at all committee hearings. Your delegates presented many written suggestions which we considered safeguards to the constituent associations and individual members. We literally fought an unceasing battle from June 1946 to June 1948 for what we believed and still believe to be right. We are happy to report that Article 1 of the new Constitution still carries as its second sentence the following: "It is a federacy of its constituent associations". Thus, the individual state associations still maintain their absolute control over membership and all other matters of state and local concern.

We also consider of paramount importance our amendment to Article 5 the phrase—"As determined by their constituent associations". This allows each constituent association to enumerate its own members without any "check-back", "striking out" or additions by any other authority. In other words, the official list of the members of the Medical Association of Georgia as sent in by the Secretary-Treasurer of this Association is the official list of members of the American Medical Association in Georgia.

One other amendment is of great concern to our Association. It occurs in Chapter IX, Section 1 (C) of the By-Laws: "Apportionment.—The apportionment of delegates from each constituent association shall be one delegate for each thousand (1,000) active members or fraction thereof, as recorded in the office of the Secretary of the American Medical Association on December 1st of each year. Such apportionment shall take effect the ensuing January 1st and shall remain effective for one year thereafter. In December of each year the Secretary of the American Medical Association shall notify each constituent association of the number of delegates to which it is entitled during the next succeeding year".

The most widely discussed action of the Interim Session held in St. Louis in December 1948 was the assessment of all members of the American Medical Association of \$25.00 each. This was done only after full and free discussion, careful consideration, and mature deliberation by all members of the House of Delegates in informal meeting. In the formal meeting it was passed unanimously.

For more than a hundred years the American Medical Association has had in its Constitution and By-Laws a provision for dues and assessments. Since the reorganization of the American Medical Association in 1902 no dues or assessments have been charged although this provision has remained in the Constitution and By-Laws. From time to time voluntary contributions have been asked for and received to carry out many of the various phases of the association's activities. For the most part these fund-raising campaigns have been carried out by individual members and groups of members acting both independently and with other organizations. Thus, the burden heretofore has fallen chiefly on the willing who have not always been the most able. We are firmly convinced that the most democratic way of raising funds is to let each member pay his individual allotment, particularly when the object is for the benefit of all. We were faced with the necessity of charging members so much per year for dues or allowing them to make a single payment in the form of an assessment. We believe the great majority of our members will prefer the single assessment and furthermore we believe that they will pay it willingly and gladly. Particularly will they do so when they stop to consider the great amount of self-sacrificing work done by many of their fellow members to carry out the objects of the association which are "to promote the science and art of medicine and the betterment of public health".

In conclusion, we assure you of our sincere appreciation of your trust and confidence in us as your delegates to the American Medical Association.

Respectfully submitted,

B. H. MINCHEW, M.D.

C. K. SHARP, M.D.

ALLEN H. BUNCE, M.D., Chairman.

The JOURNAL would like to record the scientific work of Georgia physicians. It earnestly requests, therefore, that each physician in the State who publishes a contribution in some other medical periodical submit an abstract of the article for these columns.

The Medical Association of Georgia will hold its next annual session at the Bon Air Hotel Augusta, April 17-20, 1951.

ERNST & ERNST
Accountants and Auditors
System Service
ATLANTA

Dr. W. G. Elliott
Chairman of The Council
The Medical Association of Georgia
Cuthbert, Georgia

We have examined the records and files maintained in the office of the Secretary and Treasurer of The Medical Association of Georgia. The scope of our examination included a review of the cash transactions for the year ended March 31, 1950, and accounting for the income of the Benevolent and Building Funds and the Abner Wellborn Calhoun Lectureship Fund for the year then ended, and assets held in the funds at March 31, 1950.

The records of cash transactions for six monthly periods selected by us were tested by comparisons of the totals of cash receipts recorded in the cash book with deposits shown by monthly bank statements and by inspection of paid checks, invoices and other data on file in support of the recorded disbursements.

Cash on deposit was reconciled with the amounts reported to us by the depository banks.

Securities comprising the Benevolent and Building Funds were being held in safekeeping by the Federal Reserve Bank of Atlanta as confirmed directly to us.

Securities and cash representing the Abner Wellborn Calhoun Lectureship Fund were accounted for by direct correspondence with The Citizens and Southern National Bank, Atlanta, Georgia, Trustee.

A statement of cash receipts and disbursements is included herein. Also included is a statement of assets and liabilities of the several funds and schedules of accounts receivable and accounts payable at March 31, 1950. The amounts stated for accounts receivable and accounts payable were determined from the records of The Association and, at the request of the Secretary-Treasurer, we did not correspond with the recorded debtors or creditors to confirm the book balances.

Insurance protection of The Association as determined from policies inspected by us is shown on another page of this report.

ERNST & ERNST
Certified Public Accountants.

Atlanta, Ga.
May 15, 1950.

STATEMENT OF CASH RECEIPTS AND DISBURSEMENTS
THE MEDICAL ASSOCIATION OF GEORGIA
Year Ended March 31, 1950

GENERAL FUND

Cash balance—March 31, 1949.....			\$31,362.12
General receipts and disbursements:			
Receipts:			
Membership dues collected:			
For year 1950.....	\$ 7,308.75		
For year 1949.....	3,536.00		
For year 1948.....	20.00	\$10,864.75	
Received from American Medical Association for services, postage, etc.....		732.25	
Interest on savings share account No. 6585 of Standard Federal Savings and Loan Association.....		193.02	\$11,790.02
Disbursements:			
Salaries and extra compensation:			
Secretary and Treasurer.....	\$3,000.00		
Clerical	5,850.00	\$ 8,850.00	
Less portion allocated to Association Journal.....		3,937.50	\$ 4,912.50
Expenses—as shown by schedules:			
Public relations office.....	\$ 5,976.91		
Administrative and other.....	6,841.56	12,818.47	
Office equipment purchased.....		887.83	18,618.80
			\$ 6,828.78*
Other receipts and disbursements:			
Annual meeting:			
Fees collected from exhibitors.....	\$ 7,241.50		
Less expenses of annual meeting.....	2,925.52		4,315.98
Association Journal:			
Subscriptions received	\$11,032.75		
Advertising receipts	16,967.53	\$28,000.28	

Less expenses:			
Salaries allocated	\$ 3,937.50		
Publication expenses—as shown by schedule	16,504.92	20,442.42	7,557.86
American Medical Association:			
Dues, etc. collected for remittance to A.M.A.	\$20,237.00		
Less amount remitted	18,137.00		2,100.00
Withholding (pay roll) taxes:			
Collected from employees for payment to Collector of Internal Revenue	\$ 1,080.90		
Less payments remitted	751.80		329.10
Benevolent and Building Funds:			
Interest received from U. S. Savings bonds	\$ 1,205.00		
Less U. S. Savings bond purchased	1,000.00		205.00
NET INCREASE IN CASH DURING YEAR			7,679.16
CASH BALANCE—MARCH 31, 1950			<u>\$39,041.28</u>
ABNER WELLBORN CALHOUN LECTURESHIP FUND			
Cash balance—March 31, 1949			\$ 530.89
Receipts—dividends on stocks owned by fund	\$ 195.00		
Disbursements—fees paid to Trustee	10.58		184.42
CASH BALANCE—MARCH 31, 1950			<u>\$ 715.31</u>

*Indicates disbursements in excess of receipts.

DETAILS OF EXPENSES
THE MEDICAL ASSOCIATION OF GEORGIA
Year ended March 31, 1950

PUBLIC RELATIONS OFFICE

Salaries:		
Director	\$3,152.77	
Clerical	1,233.35	\$ 4,386.12
Traveling expenses		659.95
Office supplies and expenses		266.05
Exhibit space—Southeastern Fair		200.00
Telephone and telegraph		195.18
Exhibit—Georgia State Fair		101.11
Postage		60.00
Printing		36.00
Sundry		72.50
TOTAL		\$ 5,976.91

ADMINISTRATIVE AND OTHER EXPENSES

Travel expenses	\$ 1,849.64
Medical defense—legal, etc.	1,423.95
Pension	600.00
Public policy and legislation	594.40
Contribution to Fulton County Medical Society library	500.00
Postage	492.00
Honorarium to president	300.00
Office supplies and expense	287.20
Stationery and printing	265.65
Dr. W. L. Benedict—lecture at annual meeting	150.00
Telephone and telegraph	147.89
Insurance	71.45
Sundry	159.38
TOTAL	\$ 6,841.56

PUBLICATION OF ASSOCIATION JOURNAL

Printing	\$15,161.80
Cuts of illustrations	678.61
Commission paid	278.27
Postage	220.00
Clipping service	60.00
Addressograph supplies—service	56.25
Copyright fees	48.00
Telegrams	1.99
TOTAL	\$16,504.92

STATEMENT OF FUNDS — ASSETS AND LIABILITIES
THE MEDICAL ASSOCIATION OF GEORGIA
March 31, 1950

	<i>General Fund</i>	<i>Benevolent and Building Funds</i>	<i>Abner W. Calhoun Lectureship Fund</i>	<i>Combined</i>
ASSETS				
Cash	\$39,041.28	\$.00	\$ 715.31	\$ 39,756.59
Securities owned (total market value \$66,165.25) .....	.00	63,320.00	4,604.00	67,924.00
Accounts receivable	2,724.03	.00	.00	2,724.03
Office furniture and equipment	887.83	.00	.00	887.83
TOTAL ASSETS	\$42,653.14	\$63,320.00	\$5,319.31	\$111,292.45
LIABILITIES				
Accounts payable:				
American Medical Association	\$ 2,100.00	\$.00	\$.00	\$ 2,100.00
Taxes withheld from employees	329.10	.00	.00	329.10
Other	2,033.71	.00	.00	2,033.71
TOTAL LIABILITIES	\$ 4,462.81	\$.00	\$.00	\$ 4,462.81
EXCESS OF ASSETS OVER LIABILITIES	\$38,190.33	\$63,320.00	\$5,319.31	\$106,829.64

Note A—Office furniture and equipment shown above does not include items purchased prior to April 1, 1949.

Note B—During the year ended March 31, 1950, \$750.00 was paid from the General Fund which was properly payable from specific funds as follows:

Abner W. Calhoun Lectureship Fund (Dr. W. L. Benedict—for lecture at annual meeting)	\$150.00
Benevolent Fund (pensions)	600.00
	<u>\$750.00</u>

CASH ON DEPOSIT — GENERAL FUND
THE MEDICAL ASSOCIATION OF GEORGIA
March 31, 1950

The Citizens and Southern National Bank, Atlanta, Georgia	\$32,461.35
Standard Federal Savings and Loan Association, Atlanta, Georgia	6,579.93
TOTAL	\$39,041.28

BENEVOLENT AND BUILDING FUNDS — SECURITIES OWNED
THE MEDICAL ASSOCIATION OF GEORGIA
March 31, 1950

	<i>Cost</i>	<i>Face Amount</i>	<i>Redemption Value</i>
SERIES F			
Due June 1, 1956	\$ 7,400.00	\$10,000.00	\$ 8,090.00
Due June 1, 1961	5,920.00	8,000.00	5,920.00
SERIES G			
Due July 1, 1957	15,000.00	15,000.00	14,205.00
Due March 1, 1959	15,000.00	15,000.00	14,265.00
Due Jan. 1, 1960	15,000.00	15,000.00	14,430.00
Due Jan. 1, 1962	5,000.00	5,000.00	4,940.00
TOTALS	\$63,320.00	\$68,000.00	\$61,850.00

Note—The Association appropriated funds for benevolence and building as follows:

Benevolence	\$25,000.00
Building	35,000.00
TOTAL	\$60,000.00

ABNER WELLBORN CALHOUN LECTURESHIP FUND
(THE CITIZENS AND SOUTHERN NATIONAL BANK, ATLANTA, GEORGIA — TRUSTEE)

THE MEDICAL ASSOCIATION OF GEORGIA

March 31, 1950

CASH HELD BY TRUSTEE

	<i>Principal Cash</i>	<i>Income Cash</i>	<i>Combined</i>
Balance—Mar. 31, 1949	\$369.15	\$161.74	\$530.89
Receipts:			
Dividends received:			
Georgia Power \$6.00 preferred stock .....	.00	150.00	150.00
Atlanta Gas Light 4½% preferred stock .....	.00	45.00	45.00
Transferred to "Principal" from "Income"—(see note below)	199.91	199.91*	.00
	<u>\$569.06</u>	<u>\$156.83</u>	<u>\$725.89</u>
Disbursements:			
Fees paid to Trustee .....	.00	10.58	10.58
BALANCE—MAR. 31, 1950	<u>\$569.06</u>	<u>\$146.25</u>	<u>\$715.31</u>

SECURITIES HELD BY TRUSTEE

	<i>Number of Shares</i>	<i>Market Value</i>	<i>Carrying Amount</i>
Atlanta Gas Light 4½% preferred stock	10	\$1,030.00	\$1,040.00
Georgia Power \$6.00 preferred stock	25	2,856.25	2,849.00
Southwestern Railroad common stock	13	429.00	715.00
TOTALS		<u>\$4,315.25</u>	<u>\$4,604.00</u>
TOTAL CASH AND SECURITIES			\$5,319.31

*Indicates red figures.

Note—Under the provisions of the trust indenture, "all unexpended income in the hands of trustee on July 1st of each year shall be added to the principal of the trust fund".

ACCOUNTS RECEIVABLE

THE MEDICAL ASSOCIATION OF GEORGIA

March 31, 1950

EXHIBITORS AT ANNUAL MEETING

Brayton Pharmaceutical Company	\$150.00	
Estes Surgical Supply Company	250.00	
Everhart Surgical Supply Company	150.00	
General X-Ray Corporation	250.00	
Lullaby Diaper Service	150.00	
Majors Company, J. A.	200.00	
Marks Surgical Supplies, Inc.	225.00	
Van Pelt and Brown, Inc.	225.00	\$1,600.00

FOR ADVERTISING

American Medical Association	\$833.65
Atlanta Graduate Medical Assembly	32.40
Ballard Optical Company, Walter	9.00
City View Sanitarium	12.00
Coca-Cola Company, The	20.00
Eager and Simpson	9.00
Emory University Hospital	12.00
Georgia Baptist Hospital	12.00
Keeley Institute, The	18.00
Landham and Klugh, Doctors	9.00
Long Hospital, The Crawford W.	12.00
Marshall and Bell, Inc.	7.50
Mathis, R. L.	11.00
New York Polyclinic Medical School and Hospital	16.00
Orr Doctors Building, W. W.	7.50
Patrick, Robert E.	6.00
Peachtree Sanitarium	24.99
Piedmont Hospital	12.00
Pineworth, Inc.	10.00
Smullian, A. H.	5.00

Southern Life Insurance Company of Georgia	18.00	
St. Joseph's Infirmary	12.00	
Thompson Company, J. Walter	14.99	1,124.03
TOTAL		\$2,724.03

EQUIPMENT PURCHASED

THE MEDICAL ASSOCIATION OF GEORGIA

Year ended March 31, 1950

For public relations office:		
Typewriter	\$140.51	
Mimeograph	185.94	
Desk, chair, and filing cabinet	374.98	\$701.43
For office of secretary-treasurer:		
Electric fans	\$ 41.00	
Projector	145.40	186.40
TOTAL		\$887.83

ACCOUNTS PAYABLE

THE MEDICAL ASSOCIATION OF GEORGIA

March 31, 1950

<i>Name</i>	<i>For</i>	<i>Amount</i>
American Medical Association	Dues collected	\$2,100.00
Collector of Internal Revenue	Withholding tax	329.10
Other accounts payable:		
Addressograph-Multigraph Corporation	Service	\$ 12.50
Artercraft Engraving Company	Cuts	4.53
Atlanta Linen Service	Service	3.10
Dunnaway, John A.	Legal services	75.00
Franklin Printing and Manufacturing Company	Printing	1,256.34
Foote and Davies, Inc.	Stationery	2.10
Georgia Press Association	Mailing Service	25.00
Huff, Mrs. E. Z.	Salary	75.00
Shanks, Edgar D.	Traveling, public policy & Legislation	347.00
Southern Bell Telephone and Telegraph Company	Service	39.25
Southern Press Clipping Bureau	Service	5.00
St. Louis Button Company	Badges	103.35
Thompson Printing Company	Printing, etc.	72.05
Western Union Telegraph Company	Service	8.49
TOTAL		\$4,462.81

INSURANCE PROTECTION

THE MEDICAL ASSOCIATION OF GEORGIA

March 31, 1950

LOSS OR DAMAGE TO PROJECTORS, LOUDSPEAKERS, SCREENS, PUBLIC ADDRESS SYSTEM, ETC.		\$3,400.00
FIRE		
Office furniture, fixtures, books and medical publications in office		2,000.00
FIDELITY BONDS		
Secretary and Treasurer	\$1,000.00	
Miss Viola Berry	1,000.00	2,000.00

BLUE CROSS MAKES PROGRESS

Nearly a hundred million dollars, representing more than 88 per cent of income, was paid to hospitals by the voluntary, non-profit Blue Cross Plans for care of members during the first quarter of 1950, Richard M. Jones, Chicago, director, Blue Cross Commission of the American Hospital Association, said recently.

From a total income of \$109,301,301, the 90 Blue Cross Plans of the United States and Canada paid \$96,989,972 for member's care and used only \$9,184,564 (8.37 per cent) for operating expenses.

There are more than 38,000,000 persons enrolled in the Blue Cross Plans in the United States and Canada, representing more than 24 per cent of the United

States population and 21 per cent of the Canadian people.

MEDICAL COLLEGE OF GEORGIA

Dr. -G. Lombard Kelly, President of the Medical College of Georgia, Augusta, announces the seventh offering of a post-graduate course in Office Endocrinology. This course will be given under the direction of Dr. Robert B. Greenblatt, September 4-9, 1950. Dr. Edward Henderson of Bloomfield, N. J. and Dr. Carlos P. Lamar of Miami, Fla., will be visiting lecturers. The tuition fee for the course (including luncheons) is \$50. Send applications to Registrar, Medical College of Georgia, Augusta.

WOMAN'S AUXILIARY TO THE MEDICAL ASSOCIATION OF GEORGIA OFFICERS 1950-1951

<i>President</i> Mrs. Lehman W. Williams 135 East 45th Street Savannah	<i>Treasurer</i> Mrs. Robert C. Major Magnolia Drive, Forrest Hills Augusta	<i>Mrs. J. Bonar White Exhibits and Scrapbook Awards</i> Mrs. R. E. Jones 1011 Love Avenue Tifton
<i>President-Elect</i> <i>Chairman Organization</i> Mrs. J. R. S. Mays 2587 Elizabeth Street Macon	<i>Historian</i> Mrs. Robert Crichton Milledgeville State Hospital Milledgeville	<i>Legislation</i> Mrs. Harold Smith 4 Henry Avenue Savannah
<i>First Vice-President</i> <i>Program Chairman</i> Mrs. Ralph Fowler 303 McDonald Street Marietta	<i>Parliamentarian</i> Mrs. W. Bruce Schaefer 110 East Franklin Toccoa	<i>Public Relations</i> Mrs. J. Harry Rogers 699 E. Paces Ferry Rd., N.E. Atlanta
<i>Second Vice-President</i> <i>Chairman Today's Health</i> Mrs. John W. Turner 3985 Vermont Road, N. E. Atlanta	<i>Achievement Award</i> Mrs. William H. Benson Burnt Hickory Road Marietta	<i>Research in Romance of Medicine</i> Mrs. T. J. Ferrell 1521 St. Mary's Drive Waycross
<i>Third Vice-President</i> <i>Scrapbook Chairman</i> Mrs. Paul T. Russell 513 N. Cleveland Drive Albany	<i>Archives</i> Mrs. C. W. Roberts 75 Ponce de Leon Ave., N. E. Atlanta	<i>Revisions</i> Mrs. Lee Howard 625 East 44th Street Savannah
<i>Recording Secretary</i> Mrs. Leo Smith St. Mary's Drive Waycross	<i>Budget</i> Mrs. Ralph Chaney Bransford Road Augusta	<i>Student Loan Fund</i> Mrs. Shelley C. Davis 1259 Peachtree Battle Ave., N. W. Atlanta
<i>Corresponding Secretary</i> Mrs. C. R. A. Redmond 113 Henry Avenue Savannah	<i>Bulletin</i> Mrs. Milford B. Hatcher 274 Jackson Springs Road Macon	<i>Mrs. James H. Brawner Trophy</i> Mrs. J. Harry Rogers 699 E. Paces Ferry Rd., N.E. Atlanta
	<i>Doctor's Day</i> Mrs. Virgil Williams Griffin	<i>Camellia Garden</i> Mrs. R. W. Bradford Milledgeville State Hospital Milledgeville
	<i>Editorial</i> Mrs. Ben Hill Clifton 1893 Wycliff Road, N. W. Atlanta	

REPORT OF PRESIDENT ROGERS

(April 18, 1950)

Mr. President and Members of the House of Delegates:

It is my privilege tonight to appear before you and give you an account of the work which we have done this year, work which we have accomplished as your Auxiliary. We understand full well that we are an Auxiliary and we do nothing without your approval. On August 9, 1949, the Executive Board of the Auxiliary met with the members of the advisory committee from the Medical Association and presented our plans for the year's work. We are grateful to the members of this committee—Dr. Murdock Euen, chairman; Dr. Ralph H. Chaney, Dr. J. Harry Rogers, Dr. C. F. Holton, Dr. W. G. Elliott, Dr. Eustace A. Allen, Dr. Bruce Schaefer, Dr. Thomas Ross and Dr. Shelley Davis for their assistance and their support during the year.

At this meeting they felt, as we hoped they would, that the most important thing we could do this year would be to try to alert not only our members but also our friends to the dangers America faces in the proposed compulsory health insurance bills. So, with their approval, we adopted "Fight With Knowledge" as our theme for the year and placed most emphasis on our first objective, that of forming study clubs to learn everything possible about the bills introduced

in Washington, and also about the A.M.A.'s 12 Point Program.

On August 10, the Auxiliary held its third annual mid-summer conference at which county presidents and presidents-elect met with the executive board for a fuller discussion of suggested work. At luncheon that day we were fortunate in having four of you with us. Dr. Enoch Callaway, president of the Medical Association of Georgia; Dr. Murdock Euen, chairman of the Advisory Committee to the Woman's Auxiliary; Dr. Eustace A. Allen, the Association's chairman of Public Relations; and Dr. J. Harry Rogers, who was there in his capacity as husband of the Auxiliary president.

This year the Auxiliary has the largest membership it has ever had, 1,031; there are 31 local auxiliaries and nine of the districts are organized and active. With local auxiliaries and members-at-large, we now have members in 74 counties. Each member is a liaison between you and the public and this year we were able to carry our fight for what we believed into a larger segment of the state's population than ever before. I feel very strongly that many members who were indifferent before, and others who had not cared enough to find out just what the Auxiliary is, have become interested because we have had a specific job—that of alerting ourselves and the public to the dangers of Oscar Ewing's brand of medicine.

Our primary interest has been in learning everything possible about the compulsory health insurance

bills in Congress and the 12-Point A.M.A. Program, and I am delighted to be able to report to you that every Auxiliary and every member-at-large have studied and they have learned. They have carried that knowledge with them as they talked to their friends and their neighbors, over the back fence, at the bridge table, informally at other women's meetings and under varied circumstances. We have about 25 women who are trained well enough to talk before any group—some local societies have permitted them to do so, and others have preferred that they do their talking in a more informal way.

The Auxiliary has received exceptional cooperation in this fight from your Public Relations Committee, of which Dr. Eustace A. Allen is chairman. Mr. Ed Bridges, director of Public Relations, has been invaluable to us, both as a speaker to many of our auxiliaries as we strove for knowledge and also as a speaker to lay groups at meetings arranged by us. We were able to get many influential organizations to hear Mr. Bridges, among them the Junior League of Macon, the West Point Woman's Club, the Pilot Club of Macon, the Council of Social Agencies of Bibb County, and P.T.A.'s in Avondale Estates, Jefferson and Commerce. Mr. Bridges also wrote an excellent skit, "Voluntarily Yours" for one Auxiliary to present before the wives of Georgia legislators and which other auxiliaries have since presented.

While we have devoted our chief efforts to alerting the public on compulsory health insurance, we have not neglected the other phases of our program as approved by your Advisory Committee. We have worked very hard in cooperation with other groups, members serving as health chairmen in women's clubs, P.T.A.'s, with University Women, with league of women voters and with many other similar groups. We have worked closely with the American Red Cross, the American Cancer Society, the National Foundation for Infantile Paralysis, the American Heart Association, the Cerebral Palsy Society of Georgia and with many projects on the local level, especially suited to some particular locality.

One of our members has served as co-chairman of the Governor's Committee for Georgia's participation in the Mid-Century White House Conference for Children and Youth, and three other of our members have served on this most important committee. One member has served as chairman of public relations for the Georgia Citizen's Council and has assisted in arranging the better health conferences. Two members had charge of these conferences in their region and one member is chairman of the Executive Committee of the Better Health Conference of Georgia, which is the health division of the Georgia Citizens' Council. We have members in every Auxiliary who are taking an outstanding part in the health and welfare of their respective communities as officers in other organizations. I wish I could enumerate them all, but should I do so we would be here all night. But I must mention two important community contributions members have made. One is president of the largest city federation of Women's Clubs in the state and presented an outstanding program on compulsory health insurance. Another, who is president of the Chatham County Children's Conference, was responsible for a visit to Savannah of Dr. Grace Overton, who culminated her week there with a talk, "Your Citizens' Status in a Successful Guidance Program in Your Community Schools."

One of our smaller auxiliaries has five of its members assisting with a speech school and a number of members have taken the lead in starting cerebral palsy chapters in various cities. Another smaller auxiliary presented films on human growth to their city schools, both white and colored. One of the larger auxiliaries sponsored a course in parental guidance, arranged by the Auxiliary and given in

cooperation with the YWCA, the six lectures being opened to the lay public. The program featured the development of the child from pre-school age through maturity, stressing emotional development. A brilliant panel of medical men and lay experts in human living presented the six lectures.

Our First Vice-President arranged for a booth at the Georgia State Fair to disseminate health information to a large and varied group of people, who we, as an auxiliary, do not have the opportunity of reaching by our usual open meetings, forums, etc. This booth was manned by members of one of the larger auxiliaries from 12 noon until 10 p.m. daily, Monday through Friday. They distributed thousands of pieces of health literature and hundreds of the pamphlet, *The Voluntary Way Is the American Way*. But the greatest thing they did was to show six health films to a total of 11,563 people during that time. This same auxiliary has been active in its study of compulsory health insurance, one of the members setting up a plan of study that the state legislation chairman highly complimented. They also wrote letters to the president of each organization of women in their city asking if the Auxiliary could speak to them on compulsory health insurance or either send them a speaker. This work resulted in a change in the newspapers' attitude in that city, the papers that had formerly been in favor of compulsory health insurance now straddling the fence. I am very proud of what each auxiliary is doing and from their fine reports I could cite many other outstanding achievements by each group. But again I must remember that time is limited.

Our next objective was "Every doctor's wife a member of the Auxiliary and an active participant in Auxiliary activities." That is still a dream but I hope very sincerely that all you members of the Medical Association of Georgia will make yourselves familiar with what the Auxiliary is striving to do, and then, if you approve of us and our efforts, go home and urge your wife to become one of us.

Our fourth objective has been to assist in forming health councils and we have been actively carrying out that work in many communities, both in cooperation with other organizations and under Auxiliary sponsorship. The fifth objective, stressing subscriptions to *Hygeia*, the national health magazine published by the A.M.A., and *The Bulletin*, official publication of the Woman's Auxiliary to the A.M.A., shows a result of 327 *Hygeia* subscriptions and 99 *Bulletin* subscriptions.

Our final objective, and one which is always of utmost importance to us, is that of sociability. We stand ready always to entertain county, district and state medical societies as asked, this promoting fellowship among doctors and their families. That is one thing that always remains with us, for it is the cornerstone upon which our Auxiliary has been built. One of the larger auxiliaries serves dinner twice a month for their medical society and there are usually about 200 members present. All the auxiliaries have social hours in connection with their meetings and in this way are learning to know each other better. The friendships formed are lasting and this year we in the Auxiliary have drawn even closer together as we have recognized our common danger. This year every Auxiliary celebrated Doctors' Day, some with an elaborate social affair, others with simpler entertainment, but all celebrated March 30 as the day to honor their doctors.

We have continued our work in research in Romance of Medicine, 16 papers having been contributed to the library this year. One Auxiliary is writing a history of every doctor who has ever practiced in that county. The Board of Trustees of Fulton County Medical Society graciously allotted us space at the Academy of Medicine in Atlanta to keep our perma-

neut records, which are there in file cases. Members have continued their contributions to the Student Loan Fund and we now have on hand a balance, as of March 27, of \$5,105.47, which is available for loans to eligible medical students. A newer venture of ours, one that was started last year, is the Camellia Garden at the State Hospital in Milledgeville. There are now 101 camellia plants in the garden and about 750 small azalea plants. Auxiliary members have supervised the work, buying fertilizer, sprays, etc., and the work is being done by the patients. It is thought that the garden will increase as an important occupational therapy project at the hospital as time goes on. I visited the garden twice during the year and it is something of which we can all be proud, for it will grow in beauty yearly.

I have had a very busy year, but one for which I shall always be grateful. I have driven from Rabun Gap to Tybee Light and I have found Auxiliary members interested, alert, hardworking and leaders in their communities. I have driven 8,558 miles over Georgia this year and I have spoken in every district in the State. I was privileged to assist in the reorganization of the Fourth District Auxiliary and also assisted in the reorganization of Troup County and the organization of Upson County, and South Georgia (Valdosta). Only Saturday I received a long distance telephone message that a temporary chairman for organization of Coweta County had been appointed, following the Fourth District reorganization which a number of Newnan women attended; and that she expected to have 20 members enrolled within the next few days.

I have attended 12 district meetings and 28 County Auxiliary meetings. I also participated in four legislation and public relations study clubs. I was honored by being asked to speak to the Fulton County Medical Society at their public relations meeting and to speak briefly to the societies of the Second, Fourth, Sixth and Eighth districts at their semi-annual district meetings. I have written a total of 952 personal letters and have addressed 1150 copies of our year-book, a good part of the work of compilation of which I did, as well as all the proofreading.

I attended the Conference of State Presidents and Presidents-Elect with the national officers and chairmen in Chicago in November, 1949. Two of our members are national chairmen, Mrs. Bruce Schaefer as legislation chairman and Mrs. Eustace A. Allen as revision chairman. Mrs. Schaefer, with Mrs. David B. Allman, national president, and Mrs. Robert Haynes, southern president, are among the featured speakers at our convention.

I have represented the Auxiliary many times during the year. I have served on the health committee of The Better Health Conference of Georgia and attended several meetings of this committee, as well as the 3-day conference of the Georgia Citizens Council. I was appointed to the Family Life Conference and attended a meeting at which plans for the state-wide conference to be held in February, 1951, were formulated. I also was appointed to the Governor's Safety Conference and attended two all-day sessions of that conference in Atlanta in March, serving on the committee on Public Information.

On November 17, 1949, I had a conference with Governor Herman Talmadge at which I discussed some of our problems in Georgia in connection with compulsory health insurance and at which I received his promise of his wholehearted cooperation. I have worked actively with Mrs. Z. V. Peterson, chairman of legislation for the Georgia Federation of Women's Clubs, and have received untold assistance from her. I represented the Auxiliary at a meeting held in Warm Springs to which the National Foundation for Infantile Paralysis had invited state presidents of representative Georgia women's groups. I later met with a group of Atlanta

women to formulate plans for a breakfast that was given later for the benefit of the polio fund.

By Governor Talmadge's appointment I served on his committee for Georgia's participation in The Mid-Century White House conference on children and youth, held in Atlanta February 28, 1950. I served on the health committee and was appointed by Dr. Guy Rice, chairman of this group, as one of five persons to serve on a sub-committee to write the health questionnaire to be sent to each Georgia county. The recommendations of this sub-committee will be formally presented to the full Governor's committee in June.

It has been one of the most satisfying experiences of my life to serve you and the Auxiliary as president during 1949-1950. I have met with wonderful cooperation everywhere, and the little I have done has been made possible by the unswerving loyalty of each of my officers and chairmen. Nor can I forget the wonderful cooperation from the county presidents, who are after all the heart of our Auxiliary. We who are officers and chairmen can plan, but the plans must be carried out on the county level. So to each of my official family, as well as to each member of the Auxiliary, I express my deepest gratitude. And to you of the Medical Association of Georgia, to Dr. Enoch Callaway, president; Dr. A. M. Phillips, president-elect; and Dr. Murdock Egnen, chairman of the Advisory Committee, and to all the others who have been back of us in all we have attempted this year (not to forget that husband of mine who patiently waited for me as I covered those 8,558 miles over Georgia), I say, on behalf of the Woman's Auxiliary to the Medical Association of Georgia, thank you from the bottom of our hearts, and God bless you everyone.

MRS. J. HARRY ROGERS, President,
Woman's Auxiliary to the
Medical Association of Georgia.

MEDICAL COLLEGE OF GEORGIA, AUGUSTA. SEMINAR IN EXFOLIATIVE CYTOLOGY AND CANCER DIAGNOSIS SEPTEMBER 18-23, INCLUSIVE, 1950

A seminar in exfoliative cytology and cancer diagnosis is announced by Dr. G. Lombard Kelly, President of the Medical College of Georgia.

A concentrated program of teaching on the fundamentals of exfoliative cytology and diagnostic procedures is provided. Adequate facilities are offered for microscopical and laboratory practice. A second week is offered for those who wish to devote their time entirely to the study of the ample material available.

The seminar is presented under the direction of Dr. H. E. Nieburgs and staff. Guest lecturers will be: Dr. S. Zuckerman, Professor of Anatomy, University of Birmingham, England; Dr. H. J. Wespi, Chief of Obstetrics and Gynecology, Canton Hospital of Aarau, Switzerland; Mrs. Ruth M. Graham, Vincent Memorial Hospital, Boston, Mass.; Dr. Ingrid Stergus, Pathologist Battey State Hospital, Rome, Ga., and Lt. Col. Joe M. Blumberg, Walter Reed Hospital, Washington, D. C.

MONDAY, SEPTEMBER 18

- 9:00-10:00—Registration—Miss Mary B. Cumbus, Registrar.
- 10:00-11:00—*The Value and Limitations of Exfoliative Cytology in Cancer Diagnosis*.—Dr. Nieburgs.
- 11:00-12:00—*The Effect of Hormones and Endocrine Disorders on Vaginal and Endocervical Smears*.—Dr. Nieburgs.
- 12:00-1:00—*Histiogenesis of Tissues Responsive to Estrogens*.—Dr. Zuckerman.
- 1:30-2:30—Lunch and Round Table Discussion.
- 3:00-4:00—*Histiogenesis of Tissues Responsive to Estrogens (Cont.)*.—Dr. Zuckerman.
- 4:00-5:00—*Vaginal Smears in Childhood, Adolescence; Puberty, Childbearing Age, Pregnancy and Menopause*.—S. Bamford.

TUESDAY, SEPTEMBER 19

- 9:00-10:00—*Vaginal Smears in Childhood, Adolescence; Puberty, Childbearing Age, Pregnancy and Menopause.*—(Continuation)—Dr. Nieburgs.
- 11:00-12:00—*Diagnosis of Endocrine Disorders in Childhood, Pregnancy and Menopause by Vaginal Smears.*—Dr. Nieburgs.
- 12:00-1:00—*Carcinogenic Factors of Cervical Cancer.*—Dr. Nieburgs.
- 1:30-2:30—*Lunch and Round Table Discussion.*
- 3:30-5:30—*Laboratory and Microscopy.*
- 8:00-9:00—*Motion Picture: Uterine Cancer: Pathogenesis, Detection and Diagnosis.*

WEDNESDAY, SEPTEMBER 20

- 9:00-10:00—*Morphogenesis of Cervical Cancer.*—Dr. Pund.
- 10:00-11:00—*The Genesis and Diagnosis of Preinvasive Cancer.*—Dr. Wespi.
- 11:00-12:00—*Cell Morphology in Endocervical Smears from Invasive Cervical Cancer.*—S. Bamford.
- 12:00-1:00—*Specific Cell Morphology in Endocervical Smears from Preinvasive Cervical Cancer.*—Dr. Nieburgs.
- 1:30-2:00—*Lunch and Round Table Discussion.*
- 3:00-5:30—*Laboratory and Microscopy.*
- 8:00-9:00—*Photomicrography and Motion Picture Photomicrography in the Study of Cancer Cells; Professional and Office Procedures.*—Mr. Wood and Dr. Nieburgs.

THURSDAY, SEPTEMBER 21

- 9:00-10:00—*Cell Morphology in Adenocarcinoma of the Cervix and Fandas.*—Dr. Nieburgs.
- 10:00-11:00—*Sources of Error.*—Dr. Nieburgs.
- 11:00-12:00—*The Value of Endocervical Smears during and following Radiation Therapy.*—Ruth M. Graham.
- 12:00-1:00—*The Role of Colposcopy, Schiller Test, and Exfoliative Cytology in the Early Diagnosis of Cervical Cancer.*—Dr. Wespi.
- 1:30-2:30—*Lunch and Round Table Discussion.*
- 3:00-5:30—*Laboratory and Microscopy.*
- 8:00-9:00—*Motion Picture: The Problem of Early Diagnosis. (Breast Cancer.)*

FRIDAY, SEPTEMBER 22

- 9:00-10:00—*Pathogenesis of Pulmonary Cancer.*—Dr. Pund.
- 10:00-11:00—*Cytologic Examination of Sputum and Pleural Fluids in Tumors of the Chest.*—Dr. Stergus.
- 11:00-12:00—*Diagnosis of Gastric Cancer by Exfoliative Cytology.*—Ruth M. Graham.
- 12:00-1:00—*Normal and Abnormal Cells in the Urine and Prostatic Secretion.*—Ruth M. Graham.
- 1:30-2:30—*Lunch and Round Table Discussion.*
- 3:00-5:30—*Laboratory and Microscopy.*
- 8:00-9:00—*The Role of the Pathologist in Cancer Detection.*—Col. Blumberg.

SATURDAY, SEPTEMBER 23

- 9:00-10:00—*Recent Advances in Radioactive Techniques for Cancer Diagnosis and Treatment.*—Dr. Schmidt.
- 10:00-11:00—*Procedures and Evaluation of Recent Chemical Tests for the Diagnosis of Cancer (Demonstration Lecture)*—Dr. Singal.
- 11:00-12:30—*Clinical Demonstration of Procedures for Vaginal and Endocervical Smears, Cervical Biopsies Endocervical Scrapings and Endometrial Biopsy.*—Dr. Nieburgs.
- 12:30-1:30—*Lunch and Round Table Discussion.*
- 2:00-4:00—*Microscopy.*

SEPTEMBER 25-30—INCLUSIVE

Microscopic examination of slides and laboratory procedures.

FACULTY

DR. H. J. WESPI, Chief of Obstetrics and Gynecology, Canton Hospital of Aarau, Switzerland.

DR. S. ZUCKERMAN, Professor of Anatomy, University of Birmingham, England.

MRS. RUTH M. GRAHAM, Vincent Memorial Hospital, Boston, Massachusetts.

DR. INGRID STERGUS, Pathologist, Battey State Hospital, Rome, Ga.

LT. COL. J. M. BLUMBERG, Pathologist, Walter Reed General Hospital, Army Medical Center, Washington, D. C.

DR. E. R. PUND, Professor of Pathology, Medical College of Georgia, Augusta, Ga.

DR. H. L. SCHMIDT, Consultant in Medicine, Oak Ridge Institute of Nuclear Studies.

DR. S. A. SINGAL, Associate Professor of Biochemistry, Medical College of Georgia, Augusta, Ga.

MRS. S. BAMFORD, M.S., Department of Clinical Cytology, Medical College of Georgia, Augusta, Ga.

MR. H. E. WOOD, B.P.A., Department of Art as Applied to Medicine, Medical College of Georgia, Augusta, Ga.

DR. H. E. NIEBURGS, Director, Department of Clinical Cytology, Medical College of Georgia, Augusta, Ga.

The fee is \$75.00 for the first week and \$100.00 for both weeks. Applications should be sent to the Registrar, Medical College of Georgia, Augusta, Ga. Deposits should be made to the Registrar, Medical College of Georgia, Augusta, Ga. Enrollment limited. Hotel reservations may be obtained from the Sheraton Bon Air Hotel, Partridge Inn or the Richmond Hotel, Augusta, Ga.

NEWS ITEMS

The Appling County Medical Society held its regular monthly meeting at the public health office, Baxley, June 13. Dr. Richard Torpin, Augusta, Professor of Obstetrics and Gynecology at the Medical College of Georgia was the guest speaker. His subject was: "Complications of Pregnancy and Labor and Their Treatment in General Practice." He stressed the importance of a high protein and low salt diet in the prevention of toxemia pregnancy and the treatment of the secondary anemia that goes along with pregnancy, especially anemia that goes along with hookworm infestation. It is believed that 50 per cent of the population of Appling County is infected with hookworm. Guests were Dr. Iverson Bryans, Jr., Augusta, formerly of Baxley; Dr. John W. Mauldin, Alma; Dr. C. R. Youmans, and Dr. S. W. Martin, Hazlehurst.

* * *

Dr. John T. Arnold, Parrott, recently received a fifty-year gold service pin and a Certificate of Distinction from the Medical Association of Georgia "in recognition of his unselfish devotion to his patients and his loyalty to the medical profession". Earlier this year he was honored by the Randolph-Terrell Medical Society.

* * *

Dr. William H. Bateman, Dr. Gregory W. Bateman, and Dr. Joseph D. Woddail, Atlanta, announce the removal of their offices to 517-520 Grand Theatre Building, Atlanta.

* * *

The first Better Health Conference in Northeast Georgia was held on June 9 at the University of Georgia in Athens. Dr. A. M. Phillips, Macon, President of the Medical Association of Georgia, was the principal speaker. His subject was: "Community Action for Better Health." Approximately 200 persons from 29 Northeast Georgia counties were present. Others participating on the program were Drs. T. F. Sellers, Paul Schroeder, Atlanta, and Dr. T. G. Peacock, Milledgeville. Mrs. Bruce Schaefer, Toccoa, is chair-

man of the Northeast Regional Committee and planned the conference.

* * *

Dr. Charles G. Boland, Atlanta, was recently appointed medical director of the Plantation Pipe Line Company. In addition to advising company officials on a medical and health program, he will review and advise the company on all medical reports received from approximately 50 other examining physicians.

* * *

Dr. Holloway Bush, Macon, announces the removal of his offices from 613 Bibb Building to his new office building at 959 Daisy Park, Macon.

* * *

Dr. J. M. Byne, Jr., Waynesboro; Dr. J. Dewey Gray, Augusta; Dr. C. L. Ridley, Macon; Dr. Charles N. Wasden, Macon, and Dr. H. G. Weaver, Macon, were recently elected to the Alpha Omega Alpha honorary medical fraternity, which is a national honorary medical fraternity.

* * *

Dr. Amey Chappell, Atlanta, was recently installed as President of the American Medical Women's Association at its annual meeting held in Carmel, California.

* * *

The regular monthly meeting of the Sectional Staff of Crawford W. Long Memorial Hospital was held at the hospital, Atlanta, July 11. Program: Pediatric Section, "Mortality Statistics for April" by Dr. W. L. Bridges; Medical Section, "The Lymphomas", Dr. Charles M. Huguley, Jr.; Surgical Section, "Tracheoesophageal Fistula" by Dr. Richard King; General Practitioners, "Problems for General Practitioners" by Dr. Frank Eskridge, Sr.

* * *

Dr. Lester C. Crismon, formerly of Atlanta, is now stationed at Bungalow No. 175, Lago Colony, Aruba, Netherlands West Indies. He is associated with the Lago Oil & Transport Company, Ltd.

* * *

Dr. Theodore Everett, a native of Chipley, Fla., and for the past two years a resident in urology at University Hospital, Augusta, announces the opening of his office at 1345 Greene Street, Augusta. Practice limited to urology. Dr. Everett graduated from Tulane University of Louisiana School of Medicine, New Orleans, La. He served his internship at Jackson Memorial Hospital, Miami, Fla., and served in the Medical Corps of the U. S. Navy in the Pacific area in 1945-1946. Prior to coming to University Hospital he was a resident in urology at Hillcrest Memorial Hospital, Tulsa, Okla.

* * *

Dr. David B. Fillingim, Savannah, was recently presented a silver tray by the board of trustees of the Warren A. Candler Hospital in behalf of his services during the past year. The presentation was made at the monthly meeting of the board at the hospital.

* * *

The Fourth District Medical Society held its meeting in Thomaston on June 12. The Upson County Medical Society was host at a dinner at the Veterans Clubhouse. Dr. J. M. Kellum, Thomaston, arrangements committee.

* * *

Dr. Thomas R. Freeman, formerly at Lawson VA Hospital, Chamblee, announces the opening of his offices at 513 Whitaker Street, Savannah. Practice limited to surgery.

* * *

Dr. William F. Friedewald, Atlanta, professor of bacteriology at Emory University School of Medicine, has been awarded a \$13,176 grant by the National Cancer Institute, U. S. Public Health Service for the study of "viruses and tumors." Dr. Friedewald and

other members of the Bacteriology Department will try to determine what role viruses play in producing cancer—if any. The grant to Emory was one of 50 such awards made by the Public Health Service to support cancer research in hospitals, universities and other non Federal institutions in 30 states.

* * *

The Fulton County Medical Society held its semi-monthly meeting at the Academy of Medicine, Atlanta, on July 20. The moderator was Dr. Joseph H. Rankin. Program: "Anesthesia in Pediatric Surgery", Dr. William H. Galvin; "Surgical Treatment of Gastric Ulcer" by Dr. Duncan Shepard. Members of the Clayton-Fayette and Henry County Medical Societies were special guests.

* * *

Dr. Robert B. Greenblatt, Dr. Calvin H. Chen, and Robert B. Dienst, Ph.D., all of Augusta, recently announced that gonorrhea can be cured in one day—simply by taking three doses of aureomycin at intervals of a few hours. The report was published in the *Journal of the American Medical Association*. Research on the matter has been going on for about two years. The doctors said they had 98 per cent success in treating 50 cases in this manner.

* * *

Dr. Thomas M. Hall, II, formerly of the Milledgeville State Hospital, Milledgeville, recently accepted a post on the medical staff of the Fairfield State Hospital, Newtown, Connecticut.

* * *

Dr. Charles Howard, Atlanta, announces the association of Dr. Byron Harper in the practice of medicine, 561 Lee Street, S. W., Atlanta.

* * *

Dr. A. E. James, Albany, was recently named to the American Board of Surgery. He has been working toward this appointment since 1940, and is one of 5,000 United States physicians who have been endorsed by the American Board since 1937.

* * *

Dr. George Lane, formerly associated with Dr. George H. Alexander in the Alexander Clinic, Forsyth, recently accepted a residency in surgery in the General Hospital, Greenville, S. C. Dr. Thomas L. Hodges, Jr., a native of Decatur, succeeded Dr. Lane at the Alexander Clinic.

* * *

Public Relations Office, Medical Association of Georgia: This office has been restaffed and the committee of the Association responsible for the public relations program is presently engaged in revamping the work to be done by this department. Meet, if you please, Mr. Richard J. Eales, Executive Secretary of this department, and his secretary, Miss Aldyne Johnson. Communications to the public relations department should be addressed to 875 West Peachtree St., N. E., Atlanta.

* * *

Dr. Thomas F. Little, formerly of Tifton, recently received his promotion from major to lieutenant colonel in Tokyo, Japan, where he is a surgeon in the U. S. First Calvary Division. Dr. Little has been in the Far East Command since last September. During the last war he served in the European theatre.

* * *

Dr. R. Bruce Logue, Atlanta, was elected a director of the Scientific Council of the American Heart Association at the recent annual meeting in San Francisco, Calif. Dr. Logue, past president of the Georgia Heart Association and a member of the Executive Committee, also was selected as a delegate from the Council to the Assembly, the policy-making body of the national organization. Other Georgia delegates attending the San Francisco meeting were Dr. Gordon Barrow, Atlanta, and Dr. Goodloe Y. Erwin, Athens.

MEETING OF THE EXECUTIVE COMMITTEE OF
THE PUBLIC RELATIONS COMMITTEE,
MEDICAL ASSOCIATION OF GEORGIA,
ACADEMY OF MEDICINE,
Atlanta, June 11, 1950

Present were: Dr. A. M. Phillips, president; Dr. W. G. Elliott, chairman of council; Dr. Edgar Shanks, secretary-treasurer; and Dr. Stephen T. Brown, chairman of the Public Relations Committee. Dr. C. C. Aven, chairman of the Committee on Public Policy and Legislation, was absent because of duties at another meeting.

Present also were: Drs. H. D. Allen, Jr., J. C. Norris, M. C. Pruitt, J. W. Chambers, W. S. Dorrough, H. L. Cheves, Mrs. Camille Holt and Mrs. Rita Edwards, the two last-named being private secretaries to Dr. Stephen T. Brown.

1. Dr. Edgar Shanks was requested by Dr. Stephen T. Brown and others present to read from the official records of the Association, particularly for 1949 and 1950, comment dealing with public relations, which he did.

2. After further discussion of the problem, and the duties of the Executive Committee, it was voted that Dr. Stephen T. Brown act as chairman for the Executive Committee of the Public Relations Committee for the ensuing Association year, and that Dr. Edgar Shanks act as secretary for the committee for a like period.

3. It was voted that the office of the Public Relations Department be reopened; that Dr. Stephen T. Brown, C. C. Aven and Edgar Shanks function as the *Office Committee* for the Executive Committee of the Public Relations Committee, with Dr. Brown acting as chairman and responsible to the *Office Committee* and the Executive Committee of the Public Relations Committee for the actual supervision of the personnel and activities of the Public Relations Department; that the *Office Committee* be authorized to employ some suitable woman secretary on a monthly basis to work in the Public Relations Department, and that the aforementioned *Office Committee* be the Board of Censors for all public relations material, including press releases, used in the public relations program of the Medical Association of Georgia.

4. It was voted that an Executive Secretary in Charge of Public Relations be employed as soon as consistent with good business and professional practice to work in the Public Relations Department, that the applications for this position be sent Dr. Stephen T. Brown, Medical Arts Building, Atlanta; and that if and when a sufficient number of applications have been received by Dr. Brown, the Executive Committee of the Public Relations Committee meet with the purpose of selecting a suitable person to fill this position.

5. It was voted that \$300 be donated to the Fulton County Medical Society in appreciation of the society's cooperation with the public relations program of the Medical Association of Georgia.

6. Finally, it was voted that the following budget be applicable, insofar as possible, to the Public Relations Department for the ensuing Association year:

Salary—Executive Secretary	\$5,000
Salary—Secretary	2,400
Traveling Expenses	1,500
Conferences	500
Radio Programs	1,500
Press, advice, space, etc.	1,000
Printing, Literature and Bulletins	500
Telephone and telegraph	500
Office rent	600
Stationery and office supplies	600
Postage	500
Office Equipment	500
Miscellaneous, including social security tax	300
Total Public Relations Department	\$15,400

7. Adjournment.

EDGAR D. SHANKS, M.D.
Secretary-Treasurer.

Dr. Max Mass, Macon, was the principal speaker at the June 16 meeting of the Cooperative Cluh, Macon. Dr. Mass explained the value of the x-ray in diagnosing various diseases.

* * *

Dr. Harold P. McDonald, Atlanta, read a paper at the first annual meeting of The Puerto Rico Urological Association in Santurce, Puerto Rico, entitled "Recent Advances in the Treatment of Urinary Infections." The meeting was held on July 15 and 16.

* * *

Two doctors at the Medical College of Georgia at Augusta were recently included in grants by the Federal Security Administration for cancer control research. From a total of \$352,800, Dr. H. E. Nieburgs was allotted \$6,256 and Dr. D. C. Williams, Jr., and Dr. Nieburgs, \$3,873.

* * *

Dr. J. L. Morris, Alpharetta, recently announced his retirement from active practice after 38 years in the practice of medicine. He sold his stock of drugs and clinical equipment to his son-in-law and daughter, Dr. J. A. Roberts, and Dr. Jessie Morris Roberts. The latter two took over the clinic in June and will operate it under the name of the Roberts Clinic, Alpharetta.

* * *

The Muscogee County Medical Society recently announced that Dr. William G. Love, Jr. has been named to serve as a public relations director for the society. Dr. Jack Hughston, secretary-treasurer, declared that an informed public is a more cooperative public, and said the society moved to take the action as one of its duties to spread public information. Dr. Love will work with newspapers and radio stations in reporting medical talks given to the society by prominent medical men from throughout the country. Recent guest speakers at the meeting of the society were Drs. Stephen W. Brown and E. C. Burns, Augusta, both of the radiology department, Medical College of Georgia. They discussed "Diagnostic Points in X-Ray."

* * *

Dr. L. H. Muse, Atlanta, announces the association of Dr. Julian Q. Waters, in the practice of pediatrics, 804 Medical Arts Building, Atlanta.

* * *

Dr. Thomas E. Oden, Blackshear, was recently presented with a 50-year pin and certificate of distinction by the Medical Association of Georgia honoring him for his service in the practice of medicine for half a century. Dr. Oden has practiced in Pierce County for many years and has treated patients in almost every house in the county. Ten years ago he estimated that he had delivered at least 2,000 babies.

* * *

Dr. Harry Parks, Atlanta, attended the graduate school of medicine, Harvard Medical School and Peter Bent Brigham Hospital in Boston, Mass., last month.

* * *

Dr. Samuel W. Perry and Dr. H. Bagley Benson, Atlanta, announce the association of Dr. Richard E. Boger in the practice of pediatrics, 490 Peachtree Street, N. E., Atlanta.

* * *

Dr. Frank B. Pickett, Ty Ty physician, was recently honored for his 50-odd years of "Christian ministry of healing" by hundreds of his friends and grateful patients in South Georgia. He has served Ty Ty and vicinity since 1897, during which time he has delivered more than 5,000 babies with only two maternal mortalities. Dr. C. S. Pittman, Sr., of Tifton, presented

Dr. Pickett a gift on behalf of the medical profession. Other gifts were presented by the community as a whole and by individuals.

* * *

Dr. Jack H. Powell, Jr., has returned to Newnan to enter the practice of medicine, and will be associated with Drs. Jos. B. Peniston, Jas. H. Arnold, and Jos. W. Parks, Jr., with offices in the Doctors' Building, 35 Jefferson Street, Newnan. He graduated from University of Maryland School of Medicine and College of Physicians and Surgeons, Baltimore, Md. He served one year of his internship at University Hospital, Baltimore, and has just completed two years of internship at Emory University Hospital, Atlanta.

* * *

Dr. Ralph D. Roberts, formerly of Gray, recently began the practice of medicine with Dr. Francis Ward, Fitzgerald. Dr. Roberts has completed three years of surgical training at the Macon Hospital, Macon.

* * *

Dr. Leonard J. Rabhan, Savannah, announces that his practice is now limited to diseases of the rectum and colon (proctology).

* * *

Dr. Henry T. Sherman, Valdosta, announces the opening of offices for the practice of internal medicine, 1310½ North Patterson Street, Valdosta.

* * *

Dr. Addison W. Simpson, Sr., Washington, was recently chosen as the recipient of the Gold Alumni award of Presbyterian College. The award is given annually to the alumnus who has made outstanding progress and achievement in his chosen profession. Dr. Marshall W. Brown, president of the college, at Clinton, S. C., made the award. In announcing the 1950 winner Dr. Brown cited Dr. Simpson "for his unselfish devotion in the field of medicine." Each year the award recipient is decided upon by the board of directors of the alumni association.

* * *

The forty-fourth annual meeting of the Southern Medical Association will be held in St. Louis, November 13-16, 1950. For hotel reservations address the Housing Bureau, Southern Medical Association, 911 Locust Street, Room 406, St. Louis 1, Missouri. No hotel will be designated as general hotel headquarters or headquarters for any section or official group. General Headquarters will be the Kiel Municipal Auditorium where all meetings and scientific and technical exhibits will be held.

* * *

Dr. S. D. Stoddard, Savannah physician, was honored recently at a gathering of the Salvation Army for his voluntary services to the Salvation Army's nursing home at Hunter Field. Dr. Stoddard was presented a plaque by Brig. Ernest Pickering, tri-state divisional chief, at a luncheon at the Hotel DeSoto.

* * *

Dr. H. Luten Teate, Jr., announces the opening of his office for the practice of pediatrics at 104 Ponce de Leon Avenue, N. E., Atlanta.

* * *

The Third District Medical Society recently held its meeting in the Woman's Club House, Montezuma, with doctors of Macon and Pulaski counties as hosts. Dr. C. P. Savage, Montezuma, president of the society, presided. Invocation by Rev. Chas. H. Kopp; Address of Welcome, Dr. Langdon C. Cheves, Jr., both of Montezuma; Response by Dr. Frank Schley, Columbus. Problems concerning the medical profession were discussed by physicians and surgeons including Dr. J. Z. McDaniel and Dr. Mack Sutton, of Albany; Dr. Jack C. Hughston and Dr. John S. Stewart, of Columbus; Dr. J. C. Metts and Dr. Julian K. Quattlebaum, Savannah. The Woman's Auxiliary of the Third District Medical Society held its meeting at the same time in the local Methodist Church.

Dr. Bothwell Traylor, formerly of Augusta, announces the opening of his office at 455 North Milledge Avenue, Athens. Practice limited to obstetrics and gynecology. Dr. Traylor graduated from the University of Georgia School of Medicine, Augusta, in 1943, and interned at the U. S. Marine Hospital, Seattle, Wash., then served two years with the U. S. Army Medical Corps during World War II. For the past three years he has been resident obstetrician and gynecologist on the staff of the University Hospital, Augusta. He is the son of the late Dr. George A. Traylor, former president of the Medical Association of Georgia.

* * *

Dr. Hilton F. Wall announces the opening of his office for the practice of general surgery at 21 Eighth Street, N. E., Atlanta.

* * *

The Ware County Medical Society recently held its monthly meeting at the Hotel Ware, Waycross, with Dr. William A. Hendry, Blackshear, president, presiding. Two scientific papers were presented: "Spleneectomy During Pregnancy" by Dr. T. J. Ferrell, Waycross, and "Ainhum—A Tropical Disease" by Dr. W. C. Calhoun, Waycross. Drs. Ferrell and Calhoun were hosts to the supper held just before the meeting. Physicians present were Drs. Braswell E. Collins, J. R. Gay, Harold W. Muecke, H. T. Adkins, L. W. Pierce, H. A. Seaman, A. W. DeLoach, W. B. Bates, Ed Roe Stamps, Floyd Davis, W. M. Flanagan, Vikla Shuman, Clayton M. Massey, D. M. Bradley, Leo Smith, B. H. Minchew, all of Waycross; William A. Hendry, Katherine Hendry, Thomas E. Oden, of Blackshear; R. R. McCollum, Kingsland, and D. B. Terry, Homer-ville.

* * *

Dr. J. B. Warnell, Cairo, recently celebrated the fiftieth anniversary of his graduation from Emory University School of Medicine by attending the reunion of his class in Atlanta. Dr. Warnell stated that his class numbered seventy-two at the time of graduation in 1900.

* * *

Dr. James A. Wood, Macon, gave an account of his recent tour of South America as he spoke to the Rotary Club of Brunswick at its regular meeting at the Oglethorpe Hotel, Brunswick, recently. Dr. Wood told of traveling up and down the Latin American continent and described the principal cities that he visited. Much of his address was devoted to relating his experiences and observations in Argentina. After concluding the talk, he exhibited a series of color photos that he took during his tour earlier this year.

* * *

Dr. J. J. Wright, Greenville, recent graduate of the Medical College of Georgia, Augusta, has been appointed director of the State Training School for Mental Defectives at Gracewood, near Augusta. He succeeds Dr. Wallace Winter, Augusta, who resigned after holding the job since last fall. Gracewood provides care for over 700 boys and girls of subnormal mentality.

* * *

Dr. Herbert M. Olnick, formerly of Dahlgonega, announces the opening of his office for the practice of diagnosis, radiology and therapy in the Doctors Building, 700 Spring Street, Macon.

* * *

The Baldwin County Medical Society held its monthly meeting at the Milledgeville State Hospital, Milledgeville, May 1. Dr. J. Benham Stewart, Macon, was guest speaker. His subject was "Diagnosis and Treatment of Gallbladder Diseases." Dr. Robert D. Waller, secretary.

* * *

Georgia physicians who attended the Ninety-Ninth Annual Session of the American Medical Association

held in San Francisco June 26-30 were: W. S. Cook, Albany; Carl C. Aven, J. Gordon Barrow, Marion Trotti Benson, Jr., Edgar Boling, Allen H. Bunce, Amey Chappell, Olin S. Cofer, Dan C. Elkin, Robert P. Grant, Charles M. Huguley, Jr., R. F. Reider and B. L. Shackelford, all of Atlanta; Joe M. Blumberg, Marion M. Estes, and Peter B. Wright, all of Augusta; Mercer Blanchard, Columbus; Tyrus R. Cobb, Jr., Dublin; R. N. Spencer, Fort Benning; Harold E. Shuey, Fort McPherson; O. F. Keen, A. M. Phillips, C. H. Richardson, Sr., and Henry H. Tift, all of Macon; Ralph W. Fowler, Marietta; Carol Graham Pryor, Milledgeville; Frank A. Blalock, Rome; Leonard J. Rahban, Savannah, and Clifford P. Michael, Warner Robins. The following Delegates representing the Medical Association of Georgia were seated in the opening session of the House of Delegates of the American Medical Association: Dr. Allen H. Bunce, Atlanta; Dr. Charles H. Richardson, Sr., Macon; and Dr. A. M. Phillips, Macon, in place of Dr. Benjamin H. Minchew, Waycross, who was unable to be present.

* * *

CORRECTION

Endometriosis: The Urgency for Early Diagnosis and Treatment.—In the article by Edgar H. Greene, M.D., in *The Journal* July, 1950, page 284, third paragraph and third line the reference number "3" should have been "2." On the same page, lower right hand column under numeral 3, the word "International" should have been "Intermenstrual."

COMMUNICATION

BUREAU OF MEDICAL ECONOMIC RESEARCH
OF THE
AMERICAN MEDICAL ASSOCIATION

June 13, 1950.

To: Elected and Executive Secretaries of State Medical Societies.

Subject: Life Insurance Examination Fees.

You will recall that the House of Delegates instructed George F. Lull, M.D., as secretary, to keep the state societies informed of change in the schedule of fees of life insurance companies paid to physicians for examinations and for attending physicians reports.

On the eve of the convention in San Francisco I thought that you and the Delegates from your society might like to know that 43 companies have now raised their fee schedules. The list of companies is given below. In addition, I think there are three more companies not on this list which are domiciled in the south. I am not informed regarding the amount of the increase in the fees of each company but I do know that, in general, the increase is 50 per cent across the board.

FRANK G. DICKINSON.

Aetna, American General, Bankers Life, Columbian National, Connecticut General, Connecticut Mutual, Continental Assurance, Control Life, Equitable Assurance, N. Y., Equitable of Iowa, Fidelity Mutual, Franklin Life, Great Southern, Guardian, Home Life, Jefferson Standard, Life Insurance of Vermont, Lincoln National, Manhattan, Macabees.

Metropolitan, Mutual Life, New York; Mutual Trust, National Life & Accident, National Life, Vermont; New England Mutual, New York Life, Occidental, Ohio National, Pacific Mutual, Pan American, Phoenix, Pilot Life, Provident Mutual, Prudential, Security Mutual, Southland Life, Southwestern, Standard, Oregon; State Mutual, Sun Life, Travelers, United Life & Accident.

OBITUARY

Dr. Henry W. Brooks, Sr., aged 56, Buena Vista physician, died in the St. Francis Hospital, Columbus,

June 23, 1950. He had been stricken at his Buena Vista home with a heart attack. Dr. Brooks was the son of the late Dr. S. W. and Rosa Wells Brooks of Geneva, and graduated from Emory University School of Medicine, Atlanta, in 1916. During World War I, Dr. Brooks served in the Medical Corps as a lieutenant, and after the war was connected with the Veterans Administration for eight years. Before moving to Buena Vista he had practiced medicine in Columbus, Entler and Box Springs. Dr. Brooks was a member of the Muscogee County Medical Society, the Medical Association of Georgia, and a fellow of the American Medical Association. Also a member of the Buena Vista Baptist Church, American Legion, past president of the Lions Club, and was a former member of the Marion County Board of Education. Survivors include his wife, Mrs. Allene Herring Brooks; two sons, Edward C. Brooks, Buena Vista, and Henry W. Brooks, Jr., Macon; a daughter, Mrs. Nat S. Welch Whitmire, S. C.; two sisters and four grandchildren. Funeral services were held at the Buena Vista Baptist Church with Dr. George C. Gibson, Tifton, officiating, assisted by the Rev. J. W. Clark and the Rev. T. O. Lambert. Burial was in Buena Vista.

* * *

Dr. John Gerdine, aged 75, prominent Jersey physician died at his home, June 13, 1950. He had been in ill health for some months. He was the son of the late Dr. and Mrs. John Gerdine, his father being one of the state's outstanding medical figures. He was born in West Point, Miss., and was brought to Athens as a baby, where he grew up and attended school. He graduated from the University College of Medicine, Richmond, Va., in 1909, and for sometime practiced medicine in Athens, moving to Jersey in Walton County, some 30 years ago. He had endeared himself to his numerous patients by his kindly understandable nature and his great ability as a physician. He was a member of the Walton County Medical Society, the Medical Association of Georgia, and a fellow of the American Medical Association. Dr. Gerdine is survived by his wife, Mrs. Ola Mobley Gerdine; a daughter, Miss Josephine Gerdine, Jersey; a son, Master Sergeant John Gerdine, Jr., U. S. Army, Austin, Texas; a brother, Dr. Linton Gerdine, Athens; sisters, Mrs. E. W. Lamkin and Miss Mary Gerdine, both of Athens. Funeral services were held at the Methodist Church, Jersey, with Dr. Eugene L. Hill, pastor emeritus of First Presbyterian Church, Athens, officiating, followed by graveside services at the family lot in Oconee Hill Cemetery, Athens.

* * *

Dr. Joseph E. L. Johnson, aged 82, prominent Roberta and Middle Georgia physician, died in a Macon hospital, June 29, 1950. He graduated from the Georgia College of Eclectic Medicine and Surgery, Atlanta, in 1888. He went to Roberta in 1896 and began the practice of medicine in the horse and buggy days, and had practiced medicine for more than 50 years. He had served several terms as mayor of Roberta. He was an honorary member of the Bibb County Medical Society, the Medical Association of Georgia, the American Medical Association and a member of the Southern Railway Surgical Association. Dr. Johnson was head of the health department for a number of years, assisting in establishing the health center in Crawford County. He was also a Knights Templar, a Shriner and a member of the Woodmen of the World. Survivors are his wife, the former Miss Mattie McFarland; two daughters, Mrs. Roy Young, Atlanta, and Mrs. O. O. Abernathy, Hickory, N. C.; three sons, Lawson Johnson, Roberta; J. W. Johnson, Mobile, Ala., and Topping Lussi, Thomaston, and several grandchildren. Funeral services were held at the Roberta Methodist Church with the Rev. E. B. Awtry, Smyrna, officiating. Burial was in the City Cemetery, Roberta.

Dr. William Lowndes McDougall, aged 57, prominent Atlanta eye, ear, nose and throat specialist, died following a heart attack at his home, July 18, 1950. Dr. McDougall was born in Atlanta and graduated from Emory University School of Medicine, Atlanta, in 1919. He completed his medical training at the New York Eye and Ear Infirmary, New York City, where he began the practice of medicine, and returned to Atlanta in 1923, where he has practiced for approximately 30 years. He was associate attending surgeon at the Emory University School of Medicine, where he was head of the eye, ear, nose and throat teaching staff. He was also associate surgeon at Grady Memorial Hospital, and was on the staff of St. Joseph's Infirmary, Crawford W. Long Memorial and Georgia Baptist hospitals. He was a member of the Fulton County Medical Society and had received an award from the group for 25 years service; a member of the Medical Association of Georgia, the American Medical Association, the Southeastern Surgical Congress, the Georgia Eye, Ear, Nose and Throat Society, the Fifth District Medical Society, the Chattahoochee Valley Medical and Laryngological Society and the Southern Medical Association. He was a fellow of the American College of Surgeons and was certified by the American Board of Otolaryngology. A past national officer of Sigma Chi social fraternity, he also belonged to the Phi Rho Sigma Medical Fraternity and was a past president of the Biological professional society. Dr. McDougall was a member of the Peachtree Road Methodist Church. Also of the Piedmont Driving Club and the Capital City Club. Survivors include his wife, the former Miss Mary Alice Thomas, Griffin; two daughters, Mrs. Franklin Smith and Mrs. Grattan Woodson, both of Atlanta; a son, William L. McDougall, Jr., Atlanta; two brothers, Dr. Calhoun McDougall and Robert McDougall, both of Atlanta, and several nieces and nephews. Funeral services were held at Spring Hill with Dr. E. G. Mackay officiating. Burial was in West View Cemetery, Atlanta.

* * *

Dr. Seaborn F. Scales, aged 65, prominent Carrollton and Carroll County physician and surgeon died at his home in the Hickory Level Community, June 24, 1950. Dr. Scales was born in Haralson County, the son of the late Seaborn Washington Scales and Ella Pritchard Scales. He graduated from the Atlanta School of Medicine, now Emory University School of Medicine, Atlanta, in 1910. He did postgraduate work at Cook County Hospital, Chicago, Ill. He was a member and past president of the Carroll-Douglas-Haralson Medical Society, and a member of the Medical Association of Georgia, the American Medical Association, and was also a past president of the Emory Alumni Association. Dr. Scales owned and operated a hospital at Hickory Level for several years. He later joined Dr. D. S. Reese in operation of the Carrollton Clinic. He was a generous contributor and on the staff of Tanner Memorial Hospital, Carrollton. He was past-master of the Buck Creek Masonic Lodge, a Royal Arch Mason, and a member of the Hebron Commandery. He was a past member of the Board of Stewards of the Concord Methodist Church and was a trustee at the time of his death. Dr. Scales was recognized as a talented and gifted surgeon and was well loved by the people of Carroll County. His death is a great loss not only to the profession, but the people of Carroll County. Surviving are his wife, the former Miss Mae Spence; one daughter, Mrs. Earnest Eady, and granddaughter, Miss Barbara Eady, both of Carrollton; a sister, Mrs. G. R. Huddleston, Bowdon; three brothers, Wilson Scales and Bill Scales, Carrollton, and Tom Scales, Waco. Funeral services were held at the Concord Methodist Church, Hickory Level, with the Rev. E. B. Paris officiating. The Carroll-Douglas-Haralson Medical Society served as an honorary escort. Burial was in the Concord churchyard, Hickory Level.

Dr. James Oscar Strickland, aged 72, well known Pembroke and Bryan County physician died in a Savannah hospital, July 11, 1950. A native of Bulloch County, Dr. Strickland had been a resident of Pembroke since 1901. He graduated from the Atlanta College of Physicians and Surgeons, Atlanta, in 1901, and began the practice of medicine at Pembroke as an old-time general practitioner. Dr. Strickland was always active in projects of civic, fraternal and religious nature and served as mayor of Pembroke several times. He served as a member of the Bryan County commission and had been chairman of that body several terms. He was a former state senator from the first district. Dr. Strickland served in World War I as a first lieutenant. He had been active in local business affairs and was a former vice president of the Pembroke State Bank. Survivors include his wife, Mrs. Rosa Averitt Strickland; a son, J. O. Strickland, Jr., Pembroke; a daughter, Mrs. Henry J. Stokes, Knoxville, Tenn., and seven grandchildren. Funeral services were held at the Pembroke Baptist Church with the Rev. John Joyner, pastor, officiating, assisted by the Rev. V. P. Bowers and the Rev. Tom Watson. Burial was in the Northside Cemetery, Pembroke.

NEW BOOKS

Medical Diagnosis—Applied Physical Diagnosis: Edited by Roscoe L. Pullen, M. D., F.A.C.P., Professor of Graduate Medicine, Director of the Division of Graduate Medicine, and Vice Dean of the School of Medicine, Tulane University of Louisiana; Senior Visiting Physician, Charity Hospital of Louisiana at New Orleans; Consultant in Medicine, Veterans Administration Hospital, New Orleans, Louisiana; Consultant to the Surgeon General, Department of the Army, Washington, D. C. Second edition. 1119 pages with 601 figures, 48 in color. Philadelphia and London: W. B. Saunders Company, 1950. Price \$12.50.

This is truly an applied physical diagnosis. This, the second edition, is full of good material and its editor is to be congratulated for getting together such valuable information.

* * *

A Textbook of Gynecology: by Arthur Hale Curtis, M.D., Emeritus Professor and Chairman of the Department of Obstetrics and Gynecology, Northwestern University Medical School; and John William Huffman, M.D., Associate Professor of Obstetrics and Gynecology, Northwestern University Medical School; Attending Gynecologist, Passavant Memorial Hospital, Chicago. Sixth edition. 799 pages with 466 illustrations, chiefly by Tom Jones, including 37 in color. Philadelphia and London: W. B. Saunders Company, 1950. Price \$10.00.

In its sixth and present edition, with its various facts augmented by excellent illustrations, this book should be an addition to any physician's library.

* * *

The Practice of Medicine, by Jonathan Campbell Meakins, C.B.E., M.D., LL.D., D.Sc., Fifth Edition, C. V. Mosby Company, St. Louis, 1950, pp. 1558, price \$13.50.

The fifth edition of Dr. Meakins' *Practice of Medicine* continues to maintain the standards that have made it one of the more outstanding textbooks of medicine.

Several noteworthy changes have been made in this edition. The previously sparse section on psychiatry has been replaced by one on psychosomatic medicine by Dr. Frederick R. Hanson. In order to reduce reduplication, a chapter has been devoted to chemotherapy and antibiotics. The chapter on the ductless glands has been largely rewritten. The text in its present form is well written and ably illustrated.

EDGAR SHANKS, JR., M.D.

THE JOURNAL OF THE MEDICAL ASSOCIATION OF GEORGIA

PUBLISHED MONTHLY under direction of the Council

Vol. XXXIX

Atlanta, Georgia, September, 1950

No. 9

THE GASTROSCOPE AS A DIAGNOSTIC AID IN GASTRIC DISORDERS

JOHN S. ATWATER, M.D.

Atlanta

There are some who say that the romance of medicine is of the past but the memory of my first glance through the gastroscope and later, my first manipulation of the instrument, under the guidance of Dr. Rudolph Schindler, still is with me and even now a genuine thrill is found in the excitement of an unusual gastroscopic picture. The enthusiasm of visualizing the lesion in the living subject is, of course, associated with serious practical considerations.

By and large, the flexible gastroscopes that are available on the market constitute safe instruments but one must exercise care in the choice of patients for examination. The most important contraindication to the use of the gastroscope is the presence of an aortic aneurysm. Yet, recently two patients with extensive fusiform aneurysmal dilations of the entire thoracic aorta have been instrumented without incident. There was no displacement of the esophagus demonstrable by fluoroscopy prior to the examinations. Esophageal varices rank high in importance also and probably are more commonly encountered since gastrointestinal symptoms are more likely to be present with the underlying disease producing the varices than with the aortic lesion.

Other esophageal lesions such as cardiospasm and obstructions of the esophagus are important reasons to avoid gastroscopy.

The gastroscopist's attitude has changed somewhat, however, toward cardiospasm. If cicatricial changes have not taken place to any degree, then gastroscopy still can be performed under pentothol-curare-oxygen anesthesia and sometimes, without anesthesia. We have demonstrated this and are now publishing a series of cases using this method. We have been able to gastroscope safely several patients with cardiospasm of marked degree.

Severe grades of heart disease, marked kyphoscoliosis, hiatus hernia, dyspnea and psychosis are relative contraindications. A corrosive gastritis is an absolute contraindication.

The use of the gastroscope has become just as routine to the gastroenterologist as has the cystoscope to the urologist and the bronchoscope to the chest physician and surgeon. The indications for gastroscopy include the following:

1. Gastric ulcer.
2. Gastric carcinoma.
3. Duodenal ulcer.
4. Syphilis.
5. Gastrointestinal psychoneuroses.
6. Unexplained gastrointestinal hemorrhage.
7. Unexplained weight loss.
8. Unexplained anorexia.
9. Anemia, particularly pernicious anemia; subacute combined cord degeneration; sprue.
10. Certain gastrointestinal allergic conditions.
11. Obstructive lesions of the stomach and duodenum.

It is felt by many observers that the gastroscopic observation is second only to the microscopic examination in differentiating certain lesions of the stomach as to whether they constitute benign or malignant ulcers. While it is true that grossly the surgeon and

the pathologist cannot always tell the true character of the gastric ulcer at the operating table or in the pathologic room, yet the gastroscopic picture when examined before changes in the circulation have taken place may be of great value. The advantage afforded the gastroscopist is largely due to the presence of the circulating blood which allows for sharp differences and contrasts in the color and pattern. Sometimes these contrasts are quite striking. This can be appreciated only when one has had the opportunity of actually looking through the gastroscope at such lesions.

There are several published series of comparative studies, using gastroscopic, radiologic, surgical and pathologic-surgical methods of approach to the problem of differentiation of benign and malignant gastric ulcers. From these studies it can be stated that in the hands of experienced gastroscopists a high degree of accuracy of diagnosis is available.

Separately, radiology and gastroscopy offer a great deal in helping to differentiate such lesions. Both methods, however, can be in error. When they are used as complementary procedures, the titer of diagnostic accuracy is greatly heightened.

Gastroscopy may be of invaluable aid in watching the healing of a gastric ulcer that has been managed medically. I cannot concur with the opinion stated within the past year that most gastric ulcers should be considered surgical problems. The operative mortality of gastric resection in the hands of the most skilled of surgeons is sufficiently high not to be overlooked, nor is the frequency of postoperative complications beyond reflection. When one has lost a patient who has been resected for a gastric lesion which proved to be benign, and when one has had to treat some of the postoperative gastric invalids, then one's opinion of the approach to the problem is altered. It

is my opinion that a gastric ulcer should be considered as a combined medical-surgical problem and not as a separate surgical nor a separate medical problem. Some patients will, of course, require immediate surgical treatment. Other patients will be followed medically for a time only to learn that surgical treatment is the treatment of choice. Still another group, and probably a large one, can be saved the need of surgical intervention and its attendant risks if close radiologic and gastroscopic methods of diagnosis are utilized.

Until very recent years there had been no gastroscope with a biopsy attachment available that was worth using. Many attempts have been made in the past to perfect such an instrument. However, Dr. Benedict of Boston demonstrated at the American Gastroscopic Society last year an instrument with which biopsy appears to be feasible. At the present time there are very few of these instruments in the country. Four months ago we acquired one of these operating biopsy gastroscopes and have used it successfully. If a satisfactory biopsy can be obtained with the flexible biopsy gastroscope, then much has been accomplished in solving the question as to whether a patient should be treated medically or surgically when he has a gastric ulcer.

Another manner in which gastroscopy serves is in the diagnosis of early cancerous lesions of the stomach. There are many instances of small circumscribed carcinoma on record where x-ray diagnosis, using relief technics, had failed to visualize the lesion, but where the gastroscopist was able to do so.

The operability of malignant lesions of the stomach constitutes another indication for gastroscopy. Exploratory laparotomy may be avoided entirely at times, when one bears in mind the gastroscopic picture and

correlates it with the morphologic classification of the various types of gastric tumors. The size of a gastric cancer is actually of lesser importance than its location, and from the standpoint of resectability it is important to know just how near to the cardia of the stomach the lesion exists. Generally speaking, 3 cm. of stomach below the cardia should be free of demonstrable cancerous infiltration if surgery is to be undertaken with any degree of successful expectation.

The simultaneous occurrence of gastric and duodenal ulcers is an indication for gastroscopy. Statistics favor the gastric ulcer under those circumstances as being benign in character.

The nature of an obstructing lesion at the pylorus can be offered some diagnostic help through gastroscopic methods. Gastroscopy under these circumstances might show whether the lesion was due to an intrinsic gastric carcinoma, a benign gastric ulcer, a duodenal ulcer, hypertrophic pyloric stenosis, prolapsing gastric mucosa, pedunculated polyps or other such pathologic entities.

The presence or absence of gastric syphilis can often be ascertained by gastroscopy.

X-ray methods do not always show the cause for gastrointestinal hemorrhage, yet an underlying gastritis, a severe hemorrhagic erosion or even benign tumors, may be the source of the bleeding. Frequently they can be demonstrated by gastroscopy.

Certain of the anemias, particularly pernicious anemia, combined cord degeneration and the sprue syndromes can be diagnosed gastroscopically. The effects of treatment of these conditions can also be followed by the use of the gastroscope far more effectively than by x-ray technic.

Obscure gastrointestinal complaints are not always due to psychoneuroses of the gastrointestinal tract. Some represent early carcinoma. Many represent true gastritis.

In recent years there has been more widespread use of gastric surgery due to the many excellent advances in that field. This in turn, however, has been accompanied by an increase in the complications following gastroenterostomy, gastric resection and total gastrectomy. The principal complications following gastric surgery of interest gastroscopically include the presence of marginal or gastrojejunal ulcers, gastrojejunalocolic fistula, the formation of new or recurrent gastric ulcers and a severe type of postoperative gastritis. In this last complication some of the most bizarre and widespread changes in the stomach that are observed through the gastroscope may be seen. Yet despite the magnitude of the lesion many times the radiologic opinion does not suggest any abnormality.

Lest anyone should be misled it should be pointed out that the gastroscope is not infallible, but it does offer an additional means of approaching the problem of gastric disease, both as to diagnosis and the evaluation of our methods of treatment. When gastroscopy is used as a complement to other methods of diagnosis it performs an invaluable service.

CHRONIC PANCREATIC DISEASE

CHARLES W. HOCK, M.D.

Augusta

Chronic pancreatitis is a term used synonymously with acquired fibrosis of the pancreas. The lesion is diagnosed at the operating table, the autopsy table, or by being "pancreas conscious". The incidence of this condition is far higher than is generally considered and by more detailed study of the clinical manifestations and the information obtained from the laboratory, more cases can be diagnosed clinically.

Chronic pancreatitis is not infrequently associated with diseases of the liver, bile passages and the intestine. Bacteria, virus or other toxic agents may reach the organ by the pancreatic duct, by the blood stream and by the lymphatic system. Obstruction due to any cause may be followed by chronic inflammatory changes. Operative trauma, due to operations upon the stomach, duodenum or the biliary system, may occasionally result in chronic interstitial fibrosis. Arteriosclerosis or other conditions altering the vessel walls may cause disturbances in the pancreas with resulting fibrosis. Primary diseases of the pancreas, such as acute pancreatitis, may be followed by chronic interstitial fibrosis.

Two definite types of fibrosis may be recognized; namely, the interlobular and the interacinar forms. In the former there is increased connective tissue between the irregular lobules and compression of the glandular portion. In the latter, there is marked proliferation of fibrous tissue in the glandular acini and only minimal changes in the interlobular tissue.

Chronic interlobular pancreatitis results from occlusion of the pancreatic duct or from infection due to streptococci, the colon bacillus and occasionally the typhoid bacillus. As the process progresses, such as in obstruction of the duct, the glandular tissue is replaced to a large part by fibrous tissue. Small masses of relatively normal glands are embedded in fibrous stroma which contains almost no epithelial elements. Where active degeneration of the gland is in progress, numerous lymphoid cells are present. The islands of Langerhans are unchanged until very late in the process when the acini are almost completely destroyed and replaced by dense scar-like tissue, and there is less tendency for the islands of Langerhans to be affected as the fibrosis is not as diffuse as in duct obstruction with a stone.

In the interacinar type the newly-formed fibrous tissue tends to have a more irregular distribution and the interlobular boundaries are obscured by masses and strands of new tissue within the lobules. The islands of Langerhans are affected early and with progress of the lesion they are finally destroyed and replaced by fibrous tissue. In a number of instances there is an associated sclerosis of the arteries. Chronic interacinar pancreatitis is usually the result of a blood borne infection often associated with cirrhosis of the liver, alcoholism and arteriosclerosis but the etiology is obscured in some instances.

The symptoms of chronic pancreatitis are rarely definite but the syndrome should be suspected in a patient with chronic dyspepsia with or without a history of biliary colic, if in addition there is severe or slight epigastric pain located often to the left of the midline and frequently referred to the left scapula. The patient may also have nausea, vomiting, weakness, emaciation and slight jaundice. In some cases there is intermittent glycosuria and hyperglycemia. They may also have bulky, soft, fetid stools varying in number, usually from four to eight in 24 hours. These stools, however, are more prone to occur in the early morning and morning hours. Microscopic examination and chemical tests will reveal undigested fat and protein in considerable quantities. The symptom complex, even when all symptoms are present and in many cases many of the symptoms are absent, is not pathognomonic. Therefore, great stress must be placed on the history (with gastrointestinal disturbances, jaundice, loss of weight and the type of stools) and the physician must have an awareness of pancreatic disease. At times considerable help may be obtained from aspiration of the duodenal contents and study of this for pancreatic ferments. The difficulty with this test is the

discomfort caused the patient and the fact that most laboratories do not do sufficient studies to be certain of the results. Blood amylase and lipase studies may be of considerable help in individual cases, but this is not routinely true. Most workers in the field have advised the early removal of gallstones as prophylactic treatment. Likewise inflammation in the biliary system should be treated by appropriate means. The diet of the patient with chronic pancreatitis should be low in fats, relatively low in protein (particular of the meats) and high in carbohydrates. Only the lean part of the meat should be eaten. The patient is permitted to have milk, green vegetables, raw fruits, and cereals. However, if the stools are loose in character, fruits and vegetables should be cooked always and at times omitted from the diet. Alcohol, tobacco and coffee are to be avoided. The use of sedatives and antispasmodics is quite helpful in controlling pain and helpful with loose stools. Pancreatic extract (of the triple strength variety) is of considerable help in controlling loose stools and allows the ingestion of a more liberal diet. If diabetes is present, naturally treatment of this is indicated. Some authors have suggested nonsurgical biliary drainage according to Lyon's method for infection in the biliary tract, pancreatic duct or duodenum to prevent this serious complication of chronic pancreatitis.

The following case histories are given to illustrate some of the types of histories obtainable on patients with chronic pancreatitis.

L. S., aged 42, complained of intermittent severe epigastric pain for four years, associated with alternating diarrhea and constipation. He had been a patient in numerous government hospitals and all studies were said to have been negative. In 1947 he had an exploratory laparotomy. The pancreas was found to be quite hard and the pathologic diagnosis was chronic interstitial pancreatitis. He has been treated with a low residue non-laxative diet and moderate doses of sedatives and antispasmodics with good results. He showed a transient glycosuria in 1949.

M. B., aged 68, complained of diarrhea for six

months. At the onset he had mild fever (100° F.). He had glycosuria and hyperglycemia at this time. Careful dieting helped to control loose stools and glycosuria for about six months and then the diarrhea appeared again. All studies of the gastrointestinal tract (including x-rays, cultures, sigmoidoscopic examination, etc.) were negative. The patient was given pancreatic extract, 20 grains after each meal, with an immediate cessation of all diarrhea. Furthermore the glycosuria disappeared in spite of an increase in diet.

M. S., aged 53, when first seen in July 1948, had typical symptoms of duodenal ulcer, which diagnosis was confirmed by x-ray. In January 1949 the symptoms changed and the epigastric pain became severe with radiation to the chest and back. The pain would appear around 2-4 a.m., and was entirely different from the previous pain. There was progressive loss of weight. X-ray studies of the duodenum showed a healed ulcer. Serum amylase was elevated to 300 units. The patient responded moderately well to diet, sedation and antispasmodics.

N. J., aged 41, complained of severe griping abdominal pain around the umbilicus associated with diarrhea intermittently since 1939, when she had a cholecystectomy for stones. All studies of the gastrointestinal tract were negative. The patient was first tried on a low residue non-laxative diet and antispasmodics with relatively poor results. Pancreatic extract 10 to 15 grains after meals produced constipation which was regulated by diet.

Summary

The incidence of chronic pancreatitis is far greater than has been generally recognized. The rather vague symptomatology has been a limiting factor in making the diagnosis. In any patient with chronic dyspepsia, history of biliary colic, epigastric pain radiating to the left shoulder blade, nausea, vomiting, weakness, emaciation or changes in the stools, particularly bulky, soft, fetid stools containing oil or undigested protein should be suspected of having chronic pancreatitis. Treatment consists, where possible, of removal of the stones in the biliary or pancreatic ducts, clearing up infection and the giving of a diet low in fats, relatively low in protein and generous in carbohydrates. Pancreatic extract is of value in controlling diarrhea in some cases.

REFERENCES

1. Opie: Diseases of the Pancreas, 1910.
2. Friedenwald, J.: Acute and Chronic Pancreatitis, *South. M. J.* 30:1067-1074, 1937.

HEALTHGRAM

More help is needed from tuberculosis specialists and from nutritionists in arriving at scientifically sound and practical minimum standards for relief allowances for the average tuberculosis patient and his family. Ruth Taylor, *Nat. Tuberc. A. Bull.*, Oct., 1949.

ADENOCARCINOMA OF THE COLON AND RECTUM

D. F. MULLINS, JR., M.D.

Athens

Incidence: Next to the stomach, adenocarcinoma of the colon and rectum is the most common carcinoma of the alimentary tract. About 85 per cent of these cases are seen after the age of 40 years, but the 5 per cent seen below the age of 30 years are also important. Carcinoma of the colon occurs in 3 females to 2 males, and carcinoma of the rectum in 3 males to 2 females. In our series of 37 cases the youngest was 42 years of age and the oldest 83 years, giving an average of 61 years. The sex incidence of carcinoma of the colon was 10 females to 9 males; in carcinoma of the rectum, 10 males to 8 females. Pemberton's¹ ratio of carcinoma of the colon averages: cecum, 5.95 per cent; ascending and transverse colon, 16.99; sigmoid colon, 13.55; rectosigmoid, 17.70; rectum, 46.78. When first seen, about 40 per cent are beyond cure; however, in about 88 per cent the original lesion is resectable for cure or palliation.

Causal Factors: The real cause of adenocarcinoma is unknown. There are two precancerous lesions of the colon and rectum: one, polyps; and the other, chronic ulcerative colitis. Polyps show cancerous transformation in about 10 per cent, and chronic ulcerative colitis in about 4 per cent. About 45 per cent of patients with familial polyposis develop carcinoma. A few patients with multiple neurofibromatosis of the skin have carcinoma of the alimentary tract. The possible role of chronic irritation in polyp formation is of importance. Atwater² relates that all types of

irritants have been accused of producing polyp growth. Irritants working through the medium of constipation have an opportunity to exert their most irritative action at the fixed portions of the colon, such as the cecum, flexures, rectal valves, and in these regions polyps and cancer occur most frequently. The pathogenesis of polyp formation is in dispute. While Dukes³ postulates that the only operative factor is a more lively multiplication of epithelial cells within a definite area, Cromar⁴ believes that small adenomatous changes occur in focal areas and, in time, due to the tug of the fecal stream, are pulled down to form polyps. In addition to polyps and chronic ulcerative colitis, parasites may also play a role in the production of colon cancer. Fibiger⁵ was able to produce gastric polyps in 12 of 62 rats by feeding cockroaches infested with spiroptera. Two of these polyps became malignant and metastasized to the lungs. Broders confirmed this observation.

Diagnosis: When carcinoma of the colon is suspected, an adequate examination should include, in addition to a complete history and physical examination and laboratory examination, digital rectal examination in the Sims' position, sigmoidorectoscopic, barium enema and air studies. About 77.5 per cent of rectal carcinomas are actually within reach of the examining finger. Collier⁶ further states that clinical features vary greatly, depending upon the location of the cancer. A palpable mass and severe anemia are peculiar to cancer of the right side of the colon, while obstructive phenomena and a change in bowel habits are noted in carcinoma of the left half of the colon.

Blood in the stool may be a presenting sign, and is usually associated with late cancer, produced by ulceration of the surface of the tumor. Pain and tenderness are usually due to irritation of the peritoneum.

Loss of weight is also a late sign and secondary to malnutrition, bleeding and the general effect of the malignancy.

In order to confirm the suspicion of carcinoma of the colon and rectum, the biopsy specimen with pathologic examination should be used where possible, because the surgeon can carry out definitive treatment more confidently if he knows that he is confronted with cancer. Brown and Colvert⁷ state that the correct diagnosis is made on the first x-ray examination in about 70 per cent of cases, and in about 20 per cent repeat examinations are necessary before the lesion is diagnosed. Thus the margin of error in diagnosis by x-ray is about 10 per cent in the experience of good roentgenologists. A filling defect or irregularity of the colon is the most common x-ray finding. Another possible method of diagnosis is now being used in some of the larger medical centers, by application of the Papanicolaou cancer detection test on centrifuged washings from the rectum and colon. This method may be of some value in diagnosing lesions above the range of the proctoscope. However, we need objective data regarding its use before employing the method routinely.

The lesions of the colon that may mimic cancer and should be excluded in the differential diagnosis are: diverticulas, polyps, stercolith, chronic ulcerative colitis, internal herniation, intussusception, and rarely amebiasis.

Pathologic Anatomy: About 90 per cent of all carcinomas of the colon and rectum are adenocarcinomas⁸. Two main types of adenocarcinoma of the colon may be distinguished: a. *medullary adenocarcinoma*, composed of large cauliflower-like masses projecting into the lumen, is usually located in the right colon. Clinically these patients show anemia and gross or occult blood in the stool resulting from early ulceration

of the tumor. They may be palpable in a slender person. b. *scirrhous adenocarcinoma*, composed of small atypical glands that infiltrate the wall of the colon, resulting in an annular constriction, usually located in the left side of the colon. Clinically these patients experience change in bowel habit, are constipated and tend to become obstructed. Ulceration occurs late, and anemia resulting from bleeding is uncommon. These tend to metastasize earlier than the first type. A third type, *mucoid adenocarcinoma*, constitute a small percentage, tends to infiltrate widely, and the prognosis is less favorable.

In adenocarcinoma of the rectum, pathologically and clinically we can separate two forms: a. *annular constricting ulcerated carcinoma*, which forms the majority of rectal carcinomas, and b. *papillary adenocarcinoma*. The first type is flat, infiltrates the mucosa and wall progressively in the transverse plane, ulcerates in the center and has indurated borders. In about one year the tumor invades the perirectal skin and external sphincter; second, may spread laterally to the levator ani muscle, prostate, bladder, pelvic peritoneum and female organs; third, may spread upward along the superior hemorrhoidal vessels and lymph nodes to the paracolic nodes. The second type, papillary adenocarcinoma of the rectum, many times arising in papillomas, forms a bulky tumor inside the lumen and soon invades the circumference of the rectum. Obstruction occurs fairly early. In about 95 per cent of the cases both types of rectal carcinoma may be palpated by digital examination. This tumor invades the lymph nodes later than the first type.

Metastasis: Gilchrist and David⁹ report that lymphatic spread of carcinoma of the colon is primarily embolic, but spread from one node to another is not common. These authors report lymph node metastasis

in 125 of 200 cases, and emphasize the need for the widest possible resection of lymph nodes draining the area of carcinoma. Of the 125 patients with lymph node metastasis, 56 (44.8 per cent) lived 5 years. Retrograde metastases to nodes below the tumor occurred in 4.6 per cent. The liver was the site of metastasis in 15.9 per cent. Two of the three patients in whom carcinoma of the rectum developed during pregnancy lived more than five years, suggesting that the gloomy prognosis given pregnant women with neoplasm may not be justified in carcinoma of the rectum.

Summary: Thirty-seven cases of adenocarcinoma of the colon and rectum are briefly presented.

REFERENCES

1. Bacon, H. E.: Diseases of the Rectum and Colon, Philadelphia, J. B. Lippincott Company, 1949.
2. Atwater, John S.: J. M. A. Georgia 37:252-64 (July) 1948.
3. Dukes, Cuthbert: Brit. J. Surg. 13:720, 1926.
4. Bagen, J. A.; Cromar, C. D. L., and Dixon, C. F.: Arch. Surg. 43:146, 1941.
5. Broders, A. C.: South. Med. and Surg. 102:225, 1940.
6. Collier, F. A., and Berry, R. L.: J. A. M. A. 135:1061-67, 1947.
7. Brown, C. H., and Colvert, J. R.: Ann. Int. Med. 27:936, 1947.
8. Moore, R. A.: A Textbook of Pathology, Philadelphia, W. B. Saunders Company, 1944, p. 850.
9. Gilchrist, R. K., and David, V. C.: Ann. Surg. 126:421-28, 1947.

THE CHOICE OF OPERATION IN GASTRIC AND DUODENAL ULCER

C. H. RICHARDSON, JR., M.D.

Macon

The surgical therapy of peptic ulcer has recently been under considerable discussion as the result of the introduction of vagus nerve resection or vagotomy in 1943 by Dragstedt and his co-workers at Chicago.¹

Because of this it has been necessary to try to determine the worth of this new procedure and re-evaluate old operative techniques.

The present opinions are based on a review of recent literature and a study of 27 of my cases. It is felt that every case of

peptic ulcer is an individual problem and should be evaluated and treated on its own merits. However, certain general principles can be gained from such a study.

The indications for surgery are well established and have not changed². These are hemorrhage, perforation, obstruction, and intractability. The consensus of opinion is to treat acute perforation by simple closure, and to treat massive hemorrhage conservatively at first^{2, 4}. If this fails, the operation of choice is subtotal gastric resection to control the bleeding vessel and prevent further hemorrhage^{3, 4, 29}.

This discussion of the treatment of peptic ulcer will be limited to gastroenterostomy, subtotal resection, vagotomy, and combinations of these. Other procedures have been shown to have very limited application.

Gastric Ulcer

First let us consider gastric ulcer. Only one fourth as frequent as duodenal ulcer, unless the ulcer heals promptly it should be treated surgically because of its close relation to gastric carcinoma. By careful x-ray studies and gastric analysis it is usually possible to differentiate between the two. Absence of free acid points toward malignancy and indicates early operation. When this is done a biopsy and frozen section may be helpful in deciding between a total gastrectomy and a less radical procedure. There have been reports of gastric ulcers healing after vagotomy; however, this is not consistently true^{7, 15}. Subtotal resection for this type of ulcer is technically easy with low hazard and, as the gastric acidity is rarely much increased, the operation carries a high degree of success^{5, 6, 7, 8, 33}.

TABLE 1
Gastric Ulcer

Cases—7
Treatment—Resection
Results—Satisfactory
1 Dumping syndrome
0 Recurrence.

In the present series, all of whom were operated on, seven of the 27 cases were

benign gastric ulcers and subtotal resection was chosen in all with satisfactory results, two cases having vagotomy in addition to resection.

REPORT OF CASE

Case 1. N. S., a white male, aged 45. History of episodes of severe indigestion, heartburn, and pain for ten years, not responding well to diet or alkalies. X-ray examination showed a lesion high on the posterior wall of stomach near esophagus. Gastric analysis: Free HCl 10; total 15 after alcohol. At operation a large chronic gastric ulcer penetrating the pancreas was found. Frozen section was made and showed no malignancy. Upper half of stomach and spleen along with both vagus nerves were resected, and esophagogastrostomy was done. A postoperative left subphrenic abscess developed and was drained. Patient made good recovery: had mild diarrhea at first and mild dumping syndrome, but was back at work in eight weeks and is apparently cured. He is now eating a full diet and having no G. I. complaints one year after resection.

Duodenal Ulcer

Duodenal ulcer has been called a psychosomatic disorder⁹. Certainly it is a difficult disease to treat. It has been shown that hypersecretion of gastric juice occurs, particularly at night, and perpetuates the disease¹⁰. At least two mechanisms exist that may contribute to this¹¹. One a humoral mechanism, the usual food stimulation; and the other a nervous one¹². Over-stimulation by this latter mechanism has been shown to be the main secretory fault of the peptic ulcer patient^{1 13}.

TABLE 2

Gastric Secretion

1. Humoral = Food-Antrum-Fundus
HCl & Pepsin
2. Cephalic = Vagus-Fundus
Hcl & Pepsin

Gastroenterostomy by effecting a short circuit and bringing alkaline intestinal juices in contact with the stomach will often cause the ulcer to heal. However, a recurrence rate of 20 to 30 per cent has caused it to be discarded except for the elderly patient with obstruction and a low acid where it is still the operation of choice. This procedure carries the lowest mortality of stomach operations, being around one per cent^{2 & 14}.

Subtotal gastric resection has a lower recurrence rate, but it carries a mortality of two to five per cent even in good hands¹⁴. To

TABLE 3

Results of Surgery

	Gastroenterostomy	Resection	
HEUER	4%	7%	Mortality
N. Y.	74%	83%	Good
1944			
GRAY	1%	5%	Mortality
Mayo Clinic	77%	90%	Good
1949			

be successful, the pylorus and two thirds of the stomach should be removed. The results are better if the ulcer can also be removed. Quite a few patients suffer considerable subsequent weakness and disability so that satisfactory results are reduced to approximately 85 per cent. It is quite effective in reducing the humoral food type stimulation to gastric juice¹⁶. Recurrent ulcer occurs in approximately five per cent of cases^{15 17}.

TABLE 4

Two to Five-Year Follow-Up After Vagotomy

	Cases	Satisfactory Results
GRIMSON	104	85%
DRAGSTEDT	144	80-86%
MOORE	116	88%
RUFFIN	2500	85-90%

Vagotomy, or vagus nerve resection, has been performed in over 8,000 cases and careful studies up to five years are on record¹⁸. The healing of duodenal ulcers after adequate vagotomy is quite consistent and the protection against recurrence and hemorrhage high. If a nervous mechanism is primarily at fault as has been maintained, then vagotomy is the logical procedure of choice. The operation is not without its side effects also, the major ones being loss of tone and delayed gastric emptying. Eventually this tone is regained but because of this side effect the majority of surgeons doing vagotomies now add a gastroenterostomy to prevent this retention and help the stomach empty. Theoretically vagotomy may be contraindicated in hypertensive vascular disease^{15 18 19 20 21 22 23 28 29 30 34}.

TABLE 5

Results of Surgery

	Resection	Vagotomy
GRISWOLD '49	90%	90%
WALTERS '49	85-95%	79-86%
CRILE '48	87%	89-98%
FINNEY '49	88%	97%

Several series have been reported comparing resection and vagotomy which show the successful results are approximately equal. The advantages of vagotomy are its lower mortality and the preservation of the individual's stomach^{8 15 24 25 26}.

TABLE 6
Results of Surgery

	Resection	Resection and Vagotomy
Lahey Clinic	72%	58%
Colp. Mt. Sinai	85%	85%
Finney, Hopkins	88%	96%

Some workers have combined vagotomy and resection. However, to date this has not proven to be of much added value and it adds considerably to the magnitude of the operation^{18 26 27}.

TABLE 7
Duodenal Ulcer

Cases	17
Resection	5
Result Good	4
Recurred	1
Vagotomy	12
Result Good	10
Improved	1
Failed	1

In the 17 cases of duodenal ulcer, resection was performed five times and vagotomy with gastroenterostomy twelve times. Marginal ulcer followed one subtotal resection and there was persistence of ulcer following one vagotomy, later shown to be incomplete. From these few cases the impression has been gained that the "typical ulcer patient" responds quicker to vagotomy and is on his feet sooner with less disability than with resection. The average hospital stay is cut down by one-third and early weight gain is the rule. The side effects of vagotomy have not been as severe as those of resection. Several patients have complained of mild cardiospasm, and about half have had a transitory diarrhea.

REPORTS OF CASES

Case 2. C. J. Heavy set white male, aged 42. Chronic duodenal ulcer twelve years with severe pain. Insulin test showed free acid 70 and total 150. X-rays showed duodenal deformity and persistent spasm. At operation duodenum was scarred, deformed and the ulcer apparently was attached to head of pancreas. A vagotomy was done and posterior gastroenterostomy under endotracheal ether anesthesia. Patient made an uneventful recovery and stated that his ulcer pain was completely gone as soon as he awoke. X-rays have

shown healing and complete stenosis of pylorus. P. O. insulin test showed free acid 10, total 50. He has worked steadily since recovery and has had no recurrence of symptoms in over a year.

Case 3. M. R., colored female, aged 25. Admitted because of G. I. hemorrhage. X-ray showed duodenal ulcer penetrating posteriorly. Acid values high. Vagus nerve resection and gastroenterostomy were done but pain persisted. Insulin test twice showed a positive reaction and x-rays showed non-function of gastroenterostomy. At reoperation three additional vagus fibers were found and divided and gastroenterostomy was made larger. This time P. O. insulin test negative, and ulcer then healed according to x-ray. Patient complained of some pain but has gone on to recovery.

Marginal Ulcer

The surgical result in recurrent or marginal ulcer of gastric resection is not as good as for primary ulcer^{17 2}. However, nearly all reports indicate a high success for vagotomy and recommend its use^{28 15 29}. Three marginal ulcers were treated in this series: one by resection who also had a gastric ulcer, one by vagotomy, and one by vagotomy and second gastroenterostomy. All have been satisfactory to date.

REPORT OF CASE

Case 4. L. C., white female, aged 55. In 1947 had a chronic duodenal ulcer intractable to medical treatment, duration 12 years. Free acid 55 and total 85. Operated on and subtotal resection was done. Patient developed severe retention one week postoperatively, which was relieved after another week by conservative measures. Postoperative gastric analysis with alcohol showed free acid 10 and total 15. About three months P. O. patient began to develop a marginal ulcer. This was treated conservatively for two years but failed to remain healed. An insulin test showed gastric acidity of 30 free and 70 total, so in February 1949 transabdominal vagus nerve resection was done. Postoperatively the anastomosis became obstructed and an enterostomy was done. Patient has had no further recurrence of pain and x-rays show ulcer healed. She is able to carry on a normal activity and eats a fairly normal diet.

Comment

To summarize, each patient with a peptic ulcer is an individual case and should have a thorough evaluation and trial at medical management. If this fails and surgery is resorted to, a careful correlation between the clinical picture, x-ray findings, and gastric analysis is needed to choose the procedure best for that particular case. Subtotal gastric resection is the usual choice for benign gastric ulcer. Occasionally vagotomy may be indicated in the high ulcer where the risk of gastric resection is great, although upper resection is probably a

better procedure. Duodenal ulcers with obstruction and low acid respond well to simple gastroenterostomy. Those with high acid response to insulin produced hypoglycemia should have vagotomy combined with gastroenterostomy. Those with low acid response to insulin but high response to alcohol or histamine, probably should have a resection. Vagotomy may be contraindicated in hypertensive vascular disease. Rarely resection and vagotomy combined are indicated, but cases which have had massive bleeding should have vagotomy whether resection is done or not.

Conclusions

The choice of operation in gastric ulcer is subtotal resection whenever possible. Duodenal ulcer presents more of a problem and time is needed to evaluate all factors. However, the present indications favor vagotomy and gastroenterostomy as the operation of choice. There is probably little advantage in combining resection and vagotomy as a primary procedure. Marginal ulcer, occurring after gastroenterostomy or resection, is best treated by vagotomy.

BIBLIOGRAPHY

1. Dragstedt, L. R.: Vagotomy for Gastroduodenal Ulcer, *Ann. Surg.* 122:973, 1945.
2. Heuer, G. J.: *The Treatment of Peptic Ulcer*, Philadelphia, J. B. Lippincott Company, 1944.
3. Welch, C. E.: Treatment of Acute, Massive Gastroduodenal Hemorrhage, *J.A.M.A.* 141:1113 (Dec.) 1949.
4. Lewison, E. F.: Bleeding Peptic Ulcer, *Surg. Gynec. & Obst.* 96:1-30.
5. Maimon, S. N., and Palmer, W. L.: Gastric Cancer: Diagnosis, Course, and Prognosis, *Postgrad. Med.* 6:201-211, 1949.
6. Solis-Cohen, Leon: Diseases of The Upper G. I. Tract, Correlation of Clinical and Radiologic Findings, *Postgrad. Med.* 7:106-113, 1950.
7. Weiss, S.: Peptic Ulcer, Theory and Practice, *Rev. Gastroenterol.* 16:336, 1949.
8. Crile, G., Jr.: The Surgical Treatment of Peptic Ulcer, *S. Clin. North America* p. 1123-1137 (Oct.) 1948.
9. Crohn, B.: Peptic Ulcer as a Psychosomatic Disease, *S. Clin. North America* p. 309 (April) 1947.
10. Levin, E.: Nocturnal Gastric Secretion, *Arch. Surg.* 56:345-356, 1948.
11. Best, and Taylor: *Physiological Basis of Medical Practice*, New York, William Wood & Company.
12. Griswold, R. A.: Physiologic Changes Following Vagotomy for Peptic Ulcer, *South. Surgeon* 15:1-8 (Jan.) 1949.
13. Dragstedt, L. R.: Transabdominal Gastric Vagotomy, *Surg., Gynec. & Obst.* 85:461, 1947.
14. Gray, H. K.: Results of Classical Operation for Duodenal Ulcer, *J.A.M.A.* 141:509, 1949.
15. Moore, F.: Current Practices in Surgical Treatment of Ulcer, *S. Clin. North America*, Oct., 1947.
16. Griswold, R. A.: A. Rationale for the Surgical Treatment of Duodenal Ulcer, *Surg., Gynec. & Obst.* 88:585, 1949.
17. Marshal, S. A.: Gastrojejunal Ulcer, *S. Clin. North America* (June) 1946.
18. Colp, R.: A Comparative Study of Subtotal Gastrectomy with and Without Vagotomy, *Ann. Surg.* 128:470, 1948.

19. Moore, F.: Resection of Vagus Nerves in Peptic Ulcer, *J.A.M.A.* 133:741, 1947.
20. Grimson, K. S.: Vagotomy, *Observations During Four Years, Surgery* 27:49, 1950.
21. Moore, F.: Follow Up of Vagotomy in Duodenal Ulcer, *Gastroenterology* 11:442, 1948.
22. Dragstedt, L. R.: Follow Up on Vagotomy Alone in Treatment of Peptic Ulcer, *Gastroenterology* 11:460, 1948.
23. Nordland, M.: A Clinical Evaluation of Vagotomy in the Treatment of Peptic Ulcer, *South. Surgeon*, vol. 16 (Jan.) 1950.
24. Ruffin, J. M.: The Ultimate Results of Vagotomy, *Gastroenterology* 11:466, 1948.
25. Walters, W.: Vagotomy in The Treatment of Peptic Ulcer, *Collect. Papers Mayo Clin. & Mayo Found.* 40:19, 1948.
26. Finney, G. G.: *Surgical Aspects Duodenal Ulcer*, Postgrad. Med. vol. 6 (Sept.) 1949.
27. Wilkinson, S. A.: Vagotomy Combined with Subtotal Gastrectomy, *Gastroenterology* 11:457, 1948.
28. Ruffin, J. M.: Vagotomy in the Treatment of Peptic Ulcer, *Vet. Admin. Technical Bull.* (Nov. 25) 1947.
29. Fritz, J. M. and Dragstedt, L. R.: Vagotomy: Indications and Results, *Mod. Med.* (Oct. 15) 1949.
30. Collins, E. N.; Crile, G., Jr., and Davis, J. B.: Follow Up of Vagotomy Plus Gastroenterostomy or Pyloroplasty for Ulcer, *Gastroenterology* 11:453, 1948.
31. Hollander, F.: Laboratory Procedure in the Study of Vagotomy, *Gastroenterology* 11:419, 1948.
32. Hollander, F.: Insulin Test, *Gastroenterology* 7:607, 1946.
33. Ransom, H. K.: Experiences with Total Gastrectomy, *South. Surgeon* 16:801-819 (Dec.) 1948.
34. Orr, I. M., and Johnson, H. D.: Vagal Resection in the Treatment of Duodenal Ulcer, *Lancet* 253:84 (July) 1947.
35. Thorex, P.: Vagotomy, *J.A.M.A.* 135:1146, 1947.
36. Machella, T. E.: The Mechanism of the Post-Gastrectomy Dumping Syndrome, *Ann. Surg.* 130:145, 1949.
37. Moore, F. D.: Resection of Vagus Nerves, *J.A.M.A.* 133:741, 1947.

700 Spring St.

AN ANALYSIS OF FIFTEEN CASES OF INTUSSUSCEPTION

JOHN W. TURNER, M.D.
and
AUGUST B. TURNER, M.D.
Atlanta

An analysis is made here of 15 cases of intussusception occurring at Grady Memorial Hospital from 1943 to March 1950 inclusive. Four cases encountered in private practice will also be presented briefly. Adult cases in this series will be dealt with briefly, emphasis being given to those cases occurring in infancy and childhood. During the period from January 1943 to April 1, 1950 there have been in the neighborhood of 134,346 admissions to Grady Memorial Hospital, of which approximately 38.8 per cent were white and 61.2 per cent colored. From these admissions 15 cases, both adult

Read before the Medical Association of Georgia in annual session. Macon, April 19, 1950.

and infant, are presented for evaluation. On the basis of 134,346 admissions with 15 cases of intussusception being reported there was an incidence of 0.012 per cent, or one case in ten thousand admissions. In a series of 95 cases reported by H. A. Oberhelman from 141,580 admissions to Cook County Children's Hospital in Chicago the incidence was, according to these figures, 0.067 per cent or six cases from every ten thousand admissions. This difference in incidence is not as large as one would anticipate between a general and children's hospital.

The three adult cases to be presented briefly here had an average age of 51 years and, according to the classifications of Robert H. Gibson, two of them were of the chronic type and the third was of the subacute type. Dr. Gibson states that a subacute intussusception is one in which symptoms have been present for at least one week; the chronic type is one in which symptoms have been present for more than two weeks. Two of the above adult cases gave a history of abdominal discomfort, cramps and short-lived episodes of nausea and vomiting for more than three months prior to admission. Both cases also gave a history of grossly bloody stools during their illness. The third case, which falls into the subacute classification, gave a history of intermittent cramping abdominal pain, nausea, vomiting, and diarrhea of eight days duration. There was no history of grossly bloody stools in this case. In each of these three cases the diagnosis was made preoperatively by barium enema and the patients were prepared in the usual manner for surgery. A number of investigators have reported that in the adult type of intussusception the causative factor is usually very easily demonstrated. This is borne out in the three cases presented here. Two of these cases had carcinomas of the colon which formed the

head of the intussusceptum. These two cases were treated by terminal ileectomy, partial colectomy and primary ileo-transverse colostomy. The third case, which was of the subacute type, presented a fibroma of the terminal ileum as the factor responsible for the intussusception. The treatment in this case was the same as for the above two. These three patients spent an average of 28 days in the hospital, received an average of 15 days preparation and were discharged on an average of the 12th postoperative day, to be followed in outpatient clinics.

The symptoms which usher in this disease are usually of sufficient severity and are of such sudden onset, in most instances in a previously healthy child, that the mother is prompted to bring the child to the physician early in the disease. The burden, therefore, of prompt and proper treatment, and often times of delayed and improper treatment, usually rests upon the physician who first has occasion to examine the patient. A history obtained from the mother of the patient is usually sufficient to suggest the diagnosis; a more detailed history and examination of the patient will usually either confirm the diagnosis of intussusception or suggest a disease in which the urgency for immediate treatment is not so great. There are three essential points which are prominent in this disease:

1. It is usually of rather sudden onset in a well-nourished, previously well child or infant.
2. It is characterized by severe cramplike abdominal pain of an intermittent type.
3. Nausea and vomiting are present early in the disease.

The passage of a bloody or currant jelly stool is a finding which varies considerably in the different series of cases reported. Oberhelman reports an incidence of 70 per cent, Snyder 55 per cent, Gross and Ware 85 per cent, and in the series being

presented here an incidence of 100 per cent. We think that in too many cases the patient is not presented for treatment until the mother is frightened by the finding of a diaper full of blood and in too many instances the patient's symptoms are passed over too lightly by the physician because there has been no blood in the stool, and the diagnosis is deferred until a later visit. In all cases of intussusception, we dare say, there will eventually be blood in the stool unless there is early reduction, either spontaneous or manipulative. Let us not depend upon the passage of a bloody stool before making the diagnosis in those cases which we are fortunate enough to see in their incipency. If there is a doubt in your mind as to the validity of your diagnosis, this doubt may easily be dispelled by the relatively simple procedure of a fluoroscopic study of the patient's abdomen during the time he is receiving a barium enema.

A thorough physical examination is of utmost importance here as in any other case. In 81 per cent of Oberhelman's series, 69 per cent of Snyder's series, and in 66 $\frac{2}{3}$ per cent of this series there was a mass palpable in the abdomen. This mass in most instances is fairly mobile, has been described as being sausage-shaped and, due to the dehydration usually present, is very readily palpable. In 25 per cent of the series being reported the head of the intussusceptum could be palpated directly by rectal examination; it was described in each instance as having the contour of a cervix but being much less firm. In one of these cases the head of the intussusceptum protruded from the rectum and was reduced into the rectum by the child's mother. All patients included in this series were children of indigents but, in spite of this, all were well developed, well-nourished, healthy children prior to the onset of the present illness. Dehydration, abdominal

tenderness and, in some instances, slight distention are the other physical findings which were fairly consistently present. Oberhelman reports signs of obstruction present in 42 per cent of the cases in his series. Rectal examination in addition to being of great value in palpating and locating an elusive mass may also reveal blood in the lower bowel.

The average age of patients in this series was 17 months; however, this does not give us a true picture of the situation since there were three cases included here which were 2 years, 3 years, and 7 years of age respectively. Of the 12 cases in young patients presented, 75 per cent were 10 months of age or younger and, with the exception of the above three cases, all were between the ages of five and ten months. These figures compare favorably with larger series which have been reported, as follows:

Ladd and Gross	70% between 4-11 mos.
Mayo and Phillips	80% between 4-11 mos.
Oberhelman	63% below 1 year.
Present series	75% between 5-11 mos.

For some unexplained reason this disease has a slightly greater incidence in males than in females. In Oberhelman's series there were 68 per cent males; in this series there were 58.4 per cent males.

By definition intussusception is the invagination or indigitation of a portion of the intestine into an adjacent portion. An intussusception is composed of three essential parts: the intussusceptum, the intussusciens, and the head of the intussusceptum. The intussusciens is the portion of bowel into which the intussusceptum invaginates. The head of the intussusceptum is the most distal point of advancement of the intussusceptum and may be readily identified by palpation in most cases. The type of intussusception takes its name from the parts of the bowel involved. The incidence of the different types of intussusception as report-

ed by different authors and as compared with their series is tabulated below:

individuals there is one essential which should be constantly borne in mind and that

Gross and Ware		McLaughlin	Present series
Enteric 5%		10-15%	0%
Colic 2.1%		5-10%	25%
Enterocolic 90%	{ ileocolic 76%	75-80%	75%
Other 2.92%	{ ileoileocolic 14%		{ ileocolic 58%
			{ ileoileocolic 16%

Multiple theories have been advanced in regard to the etiology of this disease which, as McLaughlin says, ranks second only to appendicitis as the cause of acute conditions in the abdomen requiring surgical treatment in infancy and childhood. Among the numerous conditions which have been referred to from time to time as possible causes of this disease are: enlarged Peyer's patches, enlarged mesenteric nodes, redundancy of the cecum, ileocecal neuromuscular dysfunction, enteric infection, excessive catharsis and transition from breast or bottle to a more solid diet. Many of these conditions have been found to be present in cases of intussusception but it has not been possible to determine whether they developed prior to, during or as a result of the intussusception. There are, however, three mechanical factors which are very definitely responsible for the production of a certain percentage of intussusceptions. These are: (1) Meckel's diverticulum, (2) intestinal polyps or tumors and (3) reduplication of the bowel. Only in rare instances can we demonstrate an etiologic factor responsible for the production of an intussusception in infancy or childhood. Ladd and Gross state that in 95 per cent of their cases no etiologic factor could be demonstrated. Oberhelman found no etiologic factor in 82.1 per cent of his cases and no etiologic factor was demonstrated in 100 per cent of the present series. In those cases in which a mechanical etiologic factor can be demonstrated it is found to be a Meckel's diverticulum in an overwhelming majority.

In the consideration of treatment for these

is promptness. Robert E. Gross states, "The interval between the onset of symptoms and the institution of treatment is of paramount importance and mortality rates will more nearly approach zero the more frequently treatment is instituted within 24 hours of onset". It has been shown that there is a very abrupt rise in the mortality when treatment is delayed more than 24 hours after the onset of symptoms. Reduction of an intussusception by means of barium enemas and hydrostatic pressure under fluoroscopic control has been advocated by some as an adjunct to surgery, but only in those cases in which the diagnosis has been made very early in the disease. It is our opinion that reduction of an intussusception is an extremely hazardous task, even under direct vision in many instances, and we do not think that reduction should be attempted by means of rectal instillations. In addition to the possibility of damaging the bowel it is also quite possible that complete reduction cannot always be obtained and the patient will have to be subjected to the additional hazard of laparotomy. X-ray should be used only as an adjunct to diagnosis. After the diagnosis of intussusception has been made, preparation for surgery should be begun immediately. While the operating room is being readied the patient should receive all necessary supportive therapy such as fluids and blood if these are necessary. Under general anaesthesia, usually open drop ether, the abdomen is opened in the right lower quadrant either by a vertical or transverse incision. The head of the intussusception is located and reduced as much

as possible, usually to the region of the ileocecal valve and ascending colon, and then the mass is retracted from the abdomen and by taxis the reduction is completed under direct vision. In case gangrenous bowel is encountered, or in case reduction is impossible, it will be necessary to resect the involved bowel. Many technics of resection have been described, all of which are equally satisfactory. The operator should carry out the procedure with which he is most familiar.

In the series of cases reported here the average time from onset of symptoms until admission to the hospital was 21 hours and 20 minutes; the average time between admission and laparotomy was roughly two hours. Our patients spent a total of 115 days in the hospital or an average of 9.5 days each. There was one death in this series, giving a mortality of 8.5 per cent. This death occurred on the 8th postoperative day and was attributed to a peritonitis of unknown origin. The patient was convalescing satisfactorily until the day of death.

Among four cases encountered in private practice there was no mortality; two of these cases were of particular interest and will be presented briefly here. One of these was an infant $3\frac{1}{2}$ months of age in whom the diagnosis of intussusception was made and laparotomy performed within 6 hours of the onset of symptoms. The intussusception was readily reduced and was found to be due to a fibroma measuring 1 cm. in diameter attached to the tip of a Meckel's diverticulum and forming the head of the intussusceptum by inverting the diverticulum. The diverticulum, along with the fibroma, was resected and the patient made an uneventful recovery. The other case was that of a boy 9 years of age in whom symptoms had existed for 36 hours prior to admission to the hospital. The diagnosis having been made,

the patient was prepared for surgery immediately. Upon opening the abdomen the intussusception was readily reduced, revealing about 12 inches of gangrenous bowel with a large Meckel's diverticulum attached. The gangrenous bowel was resected and the ends of the bowel were closed and a side-to-side anastomosis was done. Convalescence in this instance was more stormy, but the patient was not considered seriously ill at any time. In each of the four cases encountered in private practice a tumor mass was palpable in the abdomen.

Summary

In summary, it is emphasized that this disease is one which occurs predominately in infants between the ages of four and eleven months. It is relatively easily diagnosed and, though its incidence is relatively low, it does stand as the second most common acute surgical disease in this age group. Again it is emphasized that promptness in diagnosis and treatment is of extreme importance. The mortality rate in those cases requiring resection is in the neighborhood of 45 per cent.

REFERENCES

1. Ravitch, Mark M., and McCane, Robert M., Jr.: Reduction of Intussusception by Barium Enema; a Clinical and Experimental Study, *Ann. Surg.* 128:904-917 (Nov.) 1943.
2. Snyder, William H.; Kraus, Alfred R., and Chaffin, Lawrence: Intussusception in Infants and Children. A Report of 143 Consecutive Cases, *Ann. Surg.* 130:200-210 (Aug.) 1948.
3. Kahle, Richard H.: An Analysis of 151 Cases of Intussusception from Charity Hospital, New Orleans, La. *Ann. Surg.* 52:215-224 (May) 1948.
4. McLaughlin, Charles W.: Surgical Management of Irreducible Intussusception, *Arch. Surg.* 56:48-55 (Jan.) 1948.
5. Lindbey, Gustaf, and Moraler, Olello: Treatment of Acute Intussusception by an Enema of Roentgenologic Contrast Medium. *Am. J. Dis. Child.* 77:303-308 (March) 1949.
6. Oberhelman, Harry A., and Condon, John B.: Intussusception in Infants and Children. An Analysis of Ninety-five Cases in the Cook County Children's Hospital, *S. Clin. North America* pp. 3-22 (Feb.) 1947.
7. Gadbois, Raymond W.; Dean, Michael H., and Johnson, William E.: Treatment of Intussusception Caused by Invaginated Meckel's Diverticulum. Report of a Case with Review of Experience in a Community Hospital, *New England J. Med.* 241:595-600 (Oct. 20) 1949.
8. Cross, Robt. E., and Ware, Paul F.: Intussusception in Childhood. Experiences from 610 Cases, *New England J. Med.* 238:645-652 (Oct. 28) 1948.
9. Dennis, Clarence: Resection and Primary Anastomosis in the Treatment of Gangrenous or Non-Reducible Intussusception in Children. A Safe, Simple, One-layer Silk Anastomosis, *Ann. Surg.* 126:788-796 (Nov.) 1947.
10. Gibson, Robert H.; Dockerty, Malcolm B., and Dixon, Claude F.: Intussusception in Infants and Children, *S. Clin. North America* pp. 1141-1151 (Aug.) 1949.
11. Thorek, Philip, and Lorimer, W. S., Jr.: Retrograde Intussusception, *J.A.M.A.* 133:21-23 (Jan. 4) 1947.
12. Tabor, William H.: Multiple Intussusception, Direct and Retrograde, of Traumatic Origin, *Ann. Surg.* 127:730-737 (April) 1948.

13. Baener, J. Peyton: Surgical Treatment of Irreducible Intussusception in Infants, *Surg., Gynec. & Obst.* 85:747-750 (Dec.) 1947.

14. Fallis, Lawrence S., and Warren, Kenneth W.: Irreducible Intussusception in Infants. Report of Two Successful Primary Resections, *Surg., Gynec. & Obst.* 81:384-386 (Oct.) 1945.

15. Abram, Hymone S.: Intussusception. Particular Reference to Roentgen Diagnosis Without Opaque Media, *Radiology* 36:490-492 (April) 1941.

NOTE: The foregoing papers are a part of a symposium. Discussion of them will follow completion of the publication of the symposium, in the October, 1950, number of THE JOURNAL.—Ed.

DIAPHRAGMATIC HIATUS HERNIA

SANDY B. CARTER, M.D.

Atlanta

Diaphragmatic hiatus hernia is a condition that occurs fairly often but is seldom suspected. Frequently the diagnosis is not considered and not made until upper gastrointestinal roentgen studies are made in a routine check-up or for some other suspected gastrointestinal pathology.

A single case is presented briefly to illustrate some of the features that will be discussed. Twenty-seven additional unselected cases from Grady Hospital have been studied for data that may be of interest.

CASE REPORT

The patient was a 62 year old housewife, first seen Jan. 13, 1949. About 25 years ago she began to suffer from epigastric pain radiating into her back in the interscapula region, accompanied by nausea and rarely by vomiting. The attacks were usually associated with exertion of some kind, i.e. coughing, lifting, bending, housework. The attacks had increased in severity and frequency. Frequent gastrointestinal and gallbladder x-rays had been done and were always reported negative.

Physical examination revealed an obese female in no distress. The entire physical examination was negative except for slight epigastric tenderness.

Gastrointestinal series revealed a fairly large hernia of the gastric fundus protruding through the esophageal hiatus into the mid thorax. There was a gastric ulcer measuring 9 by 7 mm. on the lesser curvature margin of the stomach. Multiple diverticula were seen in the duodenum and jejunum. Gallbladder visualization was normal.

The patient was placed on a strict ulcer regimen. After four weeks the gastrointestinal tract was x-rayed again. The hiatus hernia and diverticula were visualized again but the gastric ulcer was not demonstrated, suggesting that the ulcer had healed. Although the symptoms had improved there was still considerable epigastric discomfort. Therefore, a left phrenic crush was performed. In addition, a weight reduction, semi-bland diet was instituted. The patient gradually lost from 200 down to 150 pounds. When last seen in November, 1949 she reported that she was feeling well.

Discussion

The chief obstacle in the diagnosis of diaphragmatic hiatus hernia is failure to suspect it or to look for it. It must be considered in all obscure cases of abdominal and thoracic disturbances. Some of the important characteristics of hiatus hernia to remember are that it simulates many other diseases, it varies in symptomatology, the symptoms are not constant and undergo frequent changes, and specific x-ray methods are necessary to demonstrate it. Many patients have been x-rayed before without diagnosis simply because of the matter of technique.

Harrington¹ terms this condition the "masquerader" of the upper abdomen and considers this the most important clinical consideration of diaphragmatic hernias through the esophageal hiatus. In 343 operated cases, he found an average of three previous erroneous clinical diagnoses before the correct diagnosis.

Incidence: The exact incidence of diaphragmatic hiatus hernias is unknown as evidenced by the literature on the subject. Kirklin and Hodgson² state that diaphragmatic hernias of all types occur in 1 or 2 per cent of all gastrointestinal examinations. During 10 months in which hiatus hernias were routinely looked for, Stapleton³ found 24 cases in 522 examinations, an incidence of 4.6 per cent. In two years, Brick⁴ found 308 hiatus hernias in 3,448 gastrointestinal x-ray studies, an incidence of 8.93 per cent.

Age, sex, race: The typical case has been described as an obese woman past middle age, and this seems to fit in with most of the reports. Brick⁴ found almost 77 per cent of his 308 cases occurring between the ages of 50 and 80, with the largest number in the decade from 50 to 60. Kirklin and Hodgson² also found the largest number between 50 and 59, with 92 per cent occurring after

40. The sex ratio has been reported anywhere from 2:1 to 10:1 in favor of women. Brick⁴ found 165 women and 143 men in his series of 308 cases. The small series presented here shows a ratio of 1.5:1 in favor of women. The number in each 10 year period, Table 1, showed little variation between 30 and 80 years of age.

TABLE 1

Age, Sex, Race in 28 Cases Hiatus Hernia

Age	Women	Men	White	Colored	Total
20-29	1	—	—	1	1
30-39	—	4	1	3	4
40-49	5	1	4	2	6
50-59	4	1	5	—	5
60-69	4	2	5	1	6
70-79	2	2	4	—	4
80-84	1	1	2	—	2
Total	17	11	21	7	28

No previous reports were found concerning the race distribution of hiatus hernias. In this series there were 21 white and seven colored patients, giving a ratio of three whites to one colored. This is of increased interest when it is known that of the total admissions to Grady Hospital there are 1.5 times as many colored as white. However, of the seven Negro patients, two were admitted because of massive hematemesis and one because of incarceration of the hernia. It is conceivable that Negroes are less susceptible to the ordinary symptoms of diaphragmatic hernia and present themselves only when some unusual feature appears.

Manifestations: The symptomatology of diaphragmatic hiatus hernia can be found in textbooks and will not be repeated here. As previously stated, the symptoms are varied and simulate other diseases. Some of the symptoms and the diseases they simulate are outlined in Table 2. Rudloff and King⁵ have outlined the symptoms in 50 cases and found the most frequent to be epigastric pain aggravated by reclining, dysphagia, angina of effort, pyrosis, and dyspnea. They feel that the most helpful diagnostic symptom is epigastric pain aggravated by reclining or exertion. Harrington¹ states that the symptoms depend on the amount of mechanical

TABLE 2

Symptomatology of Diaphragmatic Hiatus Hernia and Conditions They Simulate

Gastrointestinal:	Pulmonary:
Epigastric pain	Cough
Distress during or after meals	Dyspnea
Bloating	Cyanosis
Belching	Cardiac:
Heart burn	Anginal pain
Nausea	Tachycardia
Vomiting and regurgitation	Palpitation
Night pain	Cyanosis
Pain in recumbent position	Anemic:
Dysphagia	Weakness
Hiccough	Dyspnea
Hemorrhage	Pallor

interference with the function of the herniated abdominal viscerae, the degree of impairment of normal function of the diaphragm, and the amount of increased pressure within the thorax.

The symptoms in the present 28 cases are shown in Table 3. The most frequent complaints were epigastric pain and nausea and/or vomiting. Both of these symptoms occurred in an equal number of cases. Massive hematemesis occurred in five cases, two of which were in colored patients. Massive hematemesis has not been reported to occur in as large a per cent as this. However,

TABLE 3

Manifestations in 28 Cases Hiatus Hernia

Massive Hematemesis	5
Melena	4
Epigastric pain	14
Epigastric fullness and eructation	6
Nausea and/or vomiting	14
Abdominal cramps	1
Dyspnea	2
Substernal pain	2
Dysphagia	2
Anorexia	1

secondary anemia with stool positive for blood has been reported frequently in hiatus hernia. Occult blood was found in the stool of seven of the present cases and was not found in eight cases. Only 15 of the 28 cases were examined for occult blood in the stool. Nineteen cases had a red blood count recorded and nine of these were less than four million. Twenty-one had hemoglobin levels recorded and 16 of these were less than 14 Gm.

Duration of symptoms: The duration of symptoms is difficult to ascertain because it

depends on the completeness of the history. In 24 cases in which the duration of symptoms was noted it varied from one day, in two cases of massive hematemesis, to 43 years. The majority of cases, 50 per cent, were found to have had symptoms from 1 to 24 months. The duration of symptoms is shown in Table 4.

TABLE 4
Duration of Symptoms in 24 Cases of Hiatus Hernia

Duration	Number
1 day	2
3-7 days	4
1-24 months	12
3-12 years	3
20-43 years	3
Total	24

Admission diagnoses: There were 18 different impressions made on the 28 cases at the time of admission. Some cases had two or more impressions, giving a total of 46.

TABLE 5
Admission Diagnoses in 28 Cases of Hiatus Hernia

Diagnosis:	Number
Chronic cholecystitis	4
Cholelithiasis	3
Peptic ulcer	12
For diagnosis	6
Malignancy, not specified	4
Carcinoma of liver	1
Carcinoma of stomach	1
Carcinoma of colon	1
Diaphragmatic hernia	4
Hematemesis	2
Myocardial infarction	1
Multiple vitamin deficiency	1
Mediastinal tumor	1
Renal pathology	1
Megacolon	1
Appendicitis	1
Intestinal obstruction	1
Alcoholic gastritis	1
Total	46

The admission diagnosis and the number of each are shown in Table 5. The most frequent diagnosis was peptic ulcer, with gall-bladder disease and malignancy sharing the second most frequent diagnosis. There were only four cases in which the admission diagnosis was diaphragmatic hernia, and two of these had been diagnosed elsewhere and were known to have it. Some of the admission diagnoses were correct in that they were present and associated with the diaphrag-

matic hiatus hernia, which was not suspected.

Associated conditions: Diaphragmatic hiatus hernia is often associated with one or more other conditions, which may actually be the cause of the symptoms in some cases. Rudloff and King⁵ found the most frequent associated diseases to be diverticulosis of the colon (12 per cent), inguinal hernia (12 per cent), cholelithiasis (8 per cent), duodenal ulcer and diverticulum of the duodenum (6 per cent each), hypertensive cardiovascular disease (20 per cent), and pulmonary tuberculosis (10 per cent). In the 3,448 gastrointestinal x-ray studies by Brick⁴, duodenal ulcer was the most frequent lesion diagnosed, being found in 20.4 per cent of the total cases. Hiatus hernia with 8.93 per cent was the second most frequent lesion found, being twice as frequent as gastric ulcer or gastric carcinoma. In the patients with hiatus hernia the incidence of gastric carcinoma was 0.65 per cent as contrasted to 3.48 per cent in the total patients studied. In 308 cases of hiatus hernia Brick⁴ demonstrated by x-ray 77 associated gastrointestinal lesions. The most frequent were duodenal ulcer (31), hypertrophic gastritis (7), esophageal diverticulum (5), duodenal diverticulum (15), and gastric ulcer and gastric carcinoma (2 each). In the present series there were 22 associated lesions found in 14 patients. Exactly 50 per

TABLE 6
Associated Conditions in 14 of 28 Cases of Hiatus Hernia

Condition	Number
Duodenal ulcer	1
Myocardial infarction	1
Scoliosis	3
Rheumatoid arthritis	2
Hypertensive heart disease	3
Cholelithiasis	1
Carcinoma cervix	1
Diverticula jejunum	2
Diverticular colon	1
Congenital muscle deformity	1
Tuberculous adenitis	1
Diverticular duodenum	2
Inguinal hernia	2
Gastric ulcer	1
Total	22

cent of these cases had an associated lesion. These are shown in Table 6. Bockus⁶ lists the frequently associated lesions as gastric and duodenal peptic ulcer, gallbladder disease, hernia other than hiatus, and diverticulosis of the colon or duodenum or both.

Treatment and results: Treatment is outlined in Table 7. Quite often the only treatment required is correction of the associated lesions, which might be causing the symptoms. Conservative treatment is usually adequate for the hiatus hernia, and surgery is rarely indicated. Only three of the 28 cases reviewed here were operated. Two had thoracotomy with repair of the diaphragm, one because of incarceration of the hernia and one because of severe pain. The other patient operated had only a left phrenic crush.

TABLE 7

Treatment of Diaphragmatic Hiatus Hernia

Correct associated conditions.
 Avoid increase in intra-abdominal pressure.
 Sleep in semi-recumbent position.
 Walking or standing to relieve pain.
 Diet:
 Gradual weight reduction
 Bland food if symptoms active
 Small frequent feedings.
 Antacids
 Antispasmodics
 Sedatives
 Iron for anemia
 Surgery—rarely required.

The remaining cases were treated conservatively, including five cases that had massive hematemesis. The follow-up on most cases was inadequate, but when last seen practically all of them were improved.

Summary

A case of diaphragmatic hiatus hernia has been reported briefly and 28 cases analyzed and discussed. It is pointed out again that diaphragmatic hiatus hernia is fairly frequent in occurrence but is seldom suspected, not looked for specifically, and frequently not diagnosed. Associated conditions are often found and may be responsible for the symptoms. Conservative treatment is usually effective.

REFERENCES

1. Harrington, S. W.: Various Types of Diaphragmatic Hernia Treated Surgically, *Surg., Gynec. & Obst.* 86:735-755, 1948.
2. Kirklin, B. R., and Hodgson, J. R.: Roentgenologic Characteristics of Diaphragmatic Hernia, *Am. J. Roentgenol.* 58:77-101, 1947.
3. Stapleton, J. G.: Esophageal Hiatus Hernia, *Canad. M. A. J.* 57:13-16, 1947.
4. Brick, I. B.: Incidence of Hiatus Hernia and Associated Lesions Diagnosed by Roentgen Ray, *Arch. Surg.* 58:419-427, 1949.
5. Radloff, F. F., and King, R. L.: Esophageal Hiatus Hernia, *Gastroenterology* 9:249-252, 1947.
6. Bockus, H. L.: *Gastroenterology*, vol. 1, chap. 16, Philadelphia, W. B. Saunders Company, 1943.

PRESENTATION OF THE PRESIDENT'S
 GOLD KEY TO ENOCH CALLAWAY,
 M. D.

DAVID HENRY POER, M.D.

Atlanta

Dr. Irons, Dr. Meiling, Dr. Finesinger, Dr. Richardson, members and guests of the Medical Association of Georgia: In the fall of 1919 a young physician, returning from an active service in the United States Navy during World War I, entered the practice of medicine and surgery in his home town of LaGrange. Eager and enthusiastic after years of training and preparation for his life's work, Enoch was anxious to carry on the professional activities of his illustrious father, Dr. Enoch Callaway, Sr., who had passed on to him the torch of service to humanity at the tender age of nine.

One of the young doctor's first acts was to join the Medical Association of Georgia through its component unit in Troup County. That was the beginning of a long and diligent service to his State Medical Society, and during it he received all of its honors, including the presidency of his County and District Societies, and a long tenure in office in Council.

Finally, in 1948, when the State Association met in Atlanta, it chose to elect him as its President-elect for the year, and he has filled this position with honor, dignity and

distinction to the everlasting credit and glory of this Association.

Who is this man upon whose shoulders the Association has chosen to bestow its highest honor, and sees fit now to extend its approval for a job well done? One does not have to go too far back to cover the relatively brief span of Enoch Callaway's life, which began in 1893 in LaGrange, Troup County, Georgia.

Practically all of his life, except for periods of education and war service, has been spent in his home city, of which he is as much a part as the columns of his lovely home.

At Bingham Boys School in Asheville he was cadet lieutenant of the school battalion, and went from there to the University of Georgia, where he was a member of the Sigma Alpha Epsilon social fraternity. It is stated that while there he was, at least, an energetic member of the Bulldog football team, but I can find no reference to those exploits by Lawrence Camp in any All-American records.

He received the Doctor of Medicine degree from Tulane University in 1916, and while at that school he was a member of the Alpha Kappa Kappa medical fraternity and was head of the Honor Council for three years. In off moments he "assisted" the football team there.

From Tulane he went to Mississippi, where he served as intern, resident and pathologist in the State hospitals at Natchez and Jackson. It might be added that here (Jackson) he first came under the influence of one of Lord Lister's assistants, Dr. Philip Beckman, and it was under his direction that he performed his first operation for so-called "hopeless" cancer. At this time there was laid the foundation of a continually increasing interest in the control of this ofttime terrible disease, and this reached its climax with the development for his own home

folks of the important West Georgia Cancer Society in 1949, now an important center of service for that disease.

His Navy service in World War I has been mentioned. He later became the Second Commander of the LaGrange Legion Post No. 1. His interests in the civic affairs of his city, county and State are too numerous to mention, and he long has been a vestryman in the St. Mark Church, LaGrange.

His hobbies and sports have included horses—he wanted secretly to become a jockey, but refused to starve himself; farming—he owns one of the best farms in Troup County; flower raising, and golf, at which he plays a deceptively good game.

To demonstrate his youth to his attractive wife and teen-age children, he took up flying at the age of fifty-five and maintains his pilot's license in good order by active participation in this (shall we say) suicidal repast. In fact, it is the only way he could cover the large State of Georgia during the past two years to carry on the Association's business.

To top off all fancies and figurements, he now plays the piano—just why, none of his family is able to explain. Having done practically everything else well, including some boxing and wrestling as a college student, his wife who is his best admirer and critic states, "He was never intended to be a pianist. The notes are scientifically perfect, but the art of time and melody—oh, my!"

In 1923 he performed the most important and valuable act of his career when he married Miss Jennie Crowell, of Columbus, and she remains his ever constant companion and inspiration, and also his most stimulating critic and helpmate. His doctor son, Enoch III, is now receiving training in psychiatry at the Worcester State Hospital and soon will be a member of the University of Maryland staff in Baltimore. His most important daughter, Sallie, of very attractive

teen age, with corresponding accomplishments, is busy in Atlanta tonight receiving honors for her achievements in science courses in her high school. Other members of this prominent Callaway family have distinguished themselves nationally by their outstanding industrial and agricultural developments.

To all of this must be added his attainments in his chosen fields of surgery and cancer, because, after all, it is through his work in these fields that he is best known to us. As a member of the American College of Surgeons and the Southeastern Surgical Congress, he actively participates in the teaching and enhancement of the art and science of surgery. His early interest in cancer has been mentioned and this has grown each year. As pioneer member and organizer of the American Cancer Society in this State, he now heads the Georgia Division as Chairman of its Executive Committee. For many years he has served faithfully as an active member of the Cancer Commission of this Association.

Most of this work, as we all know, is of a charity nature, and this has taken a heavy toll of his time and energy. He has participated in innumerable clinics, conferences and meetings with lay and professional groups in almost every county in this State. His own modern Cancer Clinic stands forever as a moving testimonial to his sincere interests and devotion to this work.

This is but a brief sketch of the man our Association honors tonight. In honoring Enoch Callaway by presenting him with this beautiful key, it honors itself by saying, "Thank you, and Godspeed. May your good works continue forever and ever."

HEALTHGRAM

The most important factor in the development of the infant mortality rate is the standard of nutrition of the people and the most important factor in the tuberculosis rate is the standard of overcrowding. S. Leff, Med. Officer, Feb. 4, 1950.—Quoted in Am. J. Pub. Health, April, 1950.

PRESIDENT'S ADDRESS

WALTER C. PAYNE, M.D.

Pensacola

The following address by our neighbor, Dr. Payne of Pensacola, speaks for itself. Indeed, it attracted the attention of the Public Relations Department of the A. M. A., and has been widely distributed by that department.—ED.

To hold the highest office in the Florida Medical Association is an honor to be coveted, a privilege to be enjoyed and a stimulating experience fraught with memories long to be cherished. For the opportunity of serving you in this capacity I am deeply grateful. In the exercise of the office of president, I have found the excellent cooperation of the membership to be the most gratifying aspect of the work. It is this cooperation which has made possible the year's accomplishments.

The other administrative officers and the Board of Governors are to be commended most heartily for their able assistance in promoting the interests of the Association. They have traveled far, have attended meetings most faithfully and have given freely of their time, experience and judgment. The members of the various committees are likewise to be highly commended for the excellent manner in which they have discharged their duties under the competent leadership of their respective chairmen. Some committees have of necessity given more time and effort than others to their particular tasks because of the nature of their assignments, but all have labored diligently as the need required. They have earned my sincere appreciation and yours, and on behalf of the entire membership I thank them.

The Association is to be congratulated on its good fortune in having had for more than two decades Dr. Stewart G. Thompson as its managing director. His wisdom, patience, efficiency and unflagging zeal have

been a bulwark in time of trouble and a neverending source of satisfaction across the years. To him I am greatly indebted for his courteous consideration and constructive assistance throughout my term of office.

This is the fourteenth year that the district meetings have proved their worth as an important step in the progress of the Association. Until one attends officially all of these meetings in close succession, as was my privilege last October and the two years before as chairman of the Board of Governors and as president-elect respectively, he does not realize fully their great value. They promote between the officers and members informal discussion of their common problems; they stimulate interest through scientific programs; and they advance the welfare of the Association through broadened fellowship.

The Changing Times

At this seventy-sixth session of our state society we hardly need reminding that during the last quarter of a century we have witnessed a radical change in medical economics and in our public relations. The older ones of us remember, with a feeling of nostalgia, the time when the motives, integrity and sincerity of purpose of the medical profession were never questioned. The doctor occupied a place in the public esteem second to none.

The time has arrived for us to analyze the situation without bias. We must find out why a part of the public has become dissatisfied and then do whatever is necessary to remove the cause or causes of this dissatisfaction. The public can be divided into two groups: the distributors of medical care and the consumers of medical care. We as distributors must never overlook the fact that the consumers are as vitally interested in health problems as we are.

Voluntary Versus Compulsory Health Insurance

We realize fully that through no fault of ours the cost of medical and hospital care has become a burden on people of moderate income. No one knows better than the physician what a catastrophe it is when a family in this income bracket is suddenly confronted with the necessity of a major surgical procedure. There is nothing that we can do to lower the cost of medical and hospital service, but we do have a definite positive plan to so distribute this cost that it can be met without undue financial hardship on anyone.

I think we all, including the politicians, agree that prepayment health and hospital insurance is the answer. Where we violently disagree is on the method of financing this insurance. We believe that it should be done on a voluntary basis; its political proponents believe that it should be compulsory. Necessarily, compulsory health insurance would mean governmental control of the practice of medicine.

All who keep abreast of the press and radio statements of the Federal Security Administrator, especially since his recent tour of investigation in England, must realize how imminent is the threat of governmental medicine. Surely no one can question that we moved appreciably nearer state medicine with the 1948 elections. Which way we shall move, particularly in Florida, in the coming election is of vital import not alone to ourselves and our profession but to every citizen in the nation; and indeed the direction we shall take at this crucial time will have international repercussions.

There is much more than medicine's cause at stake in this year's congressional races. The dominant overshadowing issue is whether the American people are ready to abandon ship and to exchange their independence for state socialism. Socialized

medicine has become the blazing focal point in this controversy. If the nation's doctors need a great challenge to rally American medicine to a supreme effort, we have it. It is important, critically important, that we doctors do everything within our power this year to stop the march of socialism in this country, stop it at the polls by aiding in the election of members of the Congress who will have the courage to stand out against compromise and who will crusade for American principles.

The people of America this year, more than any other time in history, will be turning an appraising eye on our profession and the program of medical care which we sponsor. The work of our voluntary health insurance system will be weighed in the balance against the extravagant claims and promises of the proponents of a compulsory system.

Failure to Inform the Public

Since the beginning of medical history, the followers of Aesculapius have avoided publicity. In so doing we have allowed the public to receive its medical information from persons with selfish interests, quacks and members of off brand cults who advertise freely. We have failed to realize that the public, being vitally interested in medical matters, has a right to be properly informed. And who is better qualified, by reason of training and experience, to give this information than the men and women who have spent their lives rendering medical service? I do not believe we can escape the fact that it is our duty and our responsibility to supply this information.

Our Public Relations

In bygone years the medical profession did little in giving publicity to its problems. But times have changed, and it is hard to believe that our ethics should not be adjusted accordingly. The modern physician faces problems which must be understood by the

lay public if these problems are to be solved. Regimented medicine, state medicine, socialized medicine, or call it what you will, is truly an imminent threat. It is making its advances in the open as well as in the darker byways. Its advocates use every means of propaganda and publicity possible. If the medical profession is to combat this, it must use similar weapons.

If an active campaign is to be waged against regimentation, the old medical attitudes regarding publicity and public relations must be changed. If our profession confidently believes that it should resist all efforts of governmental control, then it must sell to the public the conviction that it has more to offer than could be offered under a federal or state program. We, in the medical field, conclude that forthright intelligent attempts to inform the public are desirable.

The Florida Medical Association, along with the American Medical Association and with other state associations, uses the radio, motion pictures, exhibits, speeches, posters, pamphlets, magazines and word of mouth, as well as newspapers, to tell about medical advances and the medical profession.

Remember that there is no group in existence with a greater potential force for excellent public relations than our profession. Patients, friends and acquaintances all look to their doctor of medicine not only for health care but also for family guidance. They call on him both to set a broken arm and to sympathize with a broken heart. Because of his or her high standing, an individual doctor can unwittingly harm the entire medical profession by some example of poor public relations.

We doctors must feel a keen responsibility in keeping medicine a free science, unchained and untrammelled. We must do everything possible to keep American Medicine what it is today, the best in the world.

Every doctor must make a special point to tell and to keep on telling the people more and more about the work of our profession, its trials, its successes, and even its failures. There is no magic formula for accomplishing all this. The only way I know to reach our goal is to widen our horizon and join our forces, thus weaving a nationwide blanket of public good will which will protect us against the coldest ill wind that blows.

To help us perform this service, our Association has a Bureau of Public Relations, whose supervisor is Mr. William Harold Parham. It is the function of this bureau, through the press, the radio and the speaking forum, to inform the public on medical matters. It is also its function to tell our story. Until recently there has been no one to look after our interests and to get our story before the public in a favorable light. This bureau operates in close cooperation with the Committee on Public Relations of our Association and with the county societies as they carry on this important work.

In informing the public of our problems through this excellent medium, we may well emphasize that we, not the politicians, are the ones who can best do the job. It is our mission to convince the public, and I am sure we can, that under state medicine service would inevitably be far inferior to that being rendered now under the practice of medicine as a free enterprise. We should go about this task in a dignified manner. Your Board of Governors has, in fact, gone on record as requesting that our arguments against governmental control of medicine be kept on a high plane. We should of course avoid personalities and name-calling and should confine our arguments to the issues involved. There is no need to becloud these issues with irrelevant matters for there are plenty of good, sound, logical facts with which to win our argument. There is like-

wise no point to blaming the public too much. Let us look to ourselves, conduct ourselves properly and inform the public wisely; then we shall win confidence and ultimately the battle for freedom.

State Grievance Committee

In the course of promoting better public relations between the medical profession and the public, there has recently come to be recognized the need for a medium through which patients may voice their grievances, real or fancied, against the profession. To meet this need, several state medical associations have established a committee on a state level to which such complaints may be presented. Such a committee is functioning successfully in at least eight state associations (Colorado, Indiana, Nebraska, New Mexico, Oklahoma, Utah, Virginia and West Virginia), and other state societies are adopting this plan. At its 1949 midwinter session, the House of Delegates of the American Medical Association approved a resolution commending those constituent associations which have already established such a committee and urging the remaining ones to adopt a comparable program.

I therefore recommend that this Association by action of its House of Delegates authorize the establishment of a grievance committee to hear and weigh complaints from the public relative to the profession and medical practices, and that this committee be composed of the five immediate past living presidents. I further recommend that this committee be empowered immediately to make such surveys of the experiences of other state medical associations as it deems essential and to draft rules and regulations to govern its activities, that the necessary funds for operating expenses be subject to the approval of the Board of Governors and that an annual report be made to the House of Delegates.

County Mediation Board

As a second specific recommendation, I propose that each constituent county medical society be urged to establish a mediation board, or similar committee by whatever name, which will serve as a screening committee for ironing out our misunderstandings and differences between patients and physicians and settling them amicably and as quickly as possible. In many instances, such complaints need not then be referred to the grievance committee at the state level. Certainly it is to the interest of the profession and the public alike that differences be settled promptly and locally if possible, and it would seem that the county medical society is the logical unit to resolve such problems with diplomacy and dispatch. The pattern of the mediation board at the county level should as nearly as practicable follow that of the grievance committee at the state level. By this means public relations should be steadily improved locally, and the work of the state committee should be greatly expedited, provided this board is widely publicized and adequately kept before the laity at all times.

President's Recommendations

Too often through the years the recommendations of successive presidents have borne no fruit because they have been allowed to become buried in cold print in the president's address with no action taken upon them. Accordingly, I am introducing an innovation at this time which I trust will in future become routine procedure. I am, as a delegate, presenting my recommendations for a grievance committee at the state level and a mediation board at the county level to the House of Delegates in the form of resolutions for action by that body. I suggest that this practice be followed in the future so that the Association may by formal action benefit as it sees fit by the proposals which are the fruits of the experience of its

presidents during tenure of office.

Office Personnel

In view of the vital importance of public relations today, it seems not inappropriate to make certain observations that may be helpful reminders. We are inclined to pay too little attention to our office personnel, forgetting how strategically situated our assistants are to be ambassadors of good or ill will in their contacts with the laity. It is highly important that we choose the members of our office staffs with extreme care, keeping the public relations aspect well in mind. Then we must take the pains to educate them in the problems of our profession, instructing them particularly in the human interest values involved. Every doctor should teach his receptionist to be courteous and efficient, to think quickly, and to demonstrate a personal interest in every patient, particularly on the telephone.

With this training put into practice, these young women are in a position to make friends for the profession and to counteract the all too frequent and the all too often justified complaint of patients that they receive disinterested treatment, inefficiency and even downright rudeness at the hands of the doctors' assistants. Many a physician might find it a revealing experience to check up on his office by telephoning for an appointment. In too many instances the public attitude would become more understandable and excusable.

The medical service men, the pharmaceutical representatives who call upon the doctors regularly, are another public relations asset. They spend much time in our offices, where they contact both the laity and the office personnel. We have the opportunity to make of them excellent liaison agents; but we must treat them courteously, show them due consideration in the office and at the exhibits, and make the effort to cultivate their friendship. In the states, Oklahoma in particular, where the medical profession has encour-

aged and assisted the organization of this group, the society formed has been most helpful in furthering wholesome public relations.

Code of Ethics

Every member of the Association recently received a booklet entitled "Principles of Medical Ethics of the American Medical Association." How many of you have read it? For generations too many of us have been content to practice on what we have heard was our code of ethics, and far too few have taken the time and trouble to read and actually study this code. All of us would do well to review, for example, Chapter III, Article III, entitled "Duties of Physicians in Consultations." The laity is not versed in how properly to obtain a consultation, and too often neither is the physician. When the ethical aspects of this feature of medical practice are properly understood and are adhered to with suitable decorum, relations within the profession and with the laity are always improved.

"The prime object of the medical profession is to render service to humanity; reward or financial gain is a subordinate consideration. Whoever chooses this profession assumes the obligation to conduct himself in accord with its ideals." So reads the opening statement of the code, and the concluding statement follows: "These principles of medical ethics have been and are set down primarily for the good of the public and should be observed in such a manner as shall merit and receive the endorsement of the community. The life of the physician, if he is capable, honest, decent, courteous, vigilant and a follower of the Golden Rule, will be in itself the best exemplification of ethical principles."

I earnestly suggest that every county medical society devote one program this year to the code of ethics, important as it is to public as well as professional relations.

In my opinion, no man or woman has the right to practice medicine who will not take the time to read and study and then follow this code. It cannot be stated too emphatically that if ever there was a time when we of the medical profession need to conduct ourselves in a manner that will deserve and receive from the public good will, confidence and faith, it is now.

Conclusion

The American Medical Association is 103 years old. For more than 75 years after its organization it interested itself almost exclusively in the preservation and prolongation of life and health. It goes without saying that we must continue our scientific advancement, never forgetting that it is the one road that leads to medicine's goal of better health and longer life for our people. In our enthusiasm for scientific improvement we must not, however, neglect the art of practice. Let us never forget that medicine must be practiced with the heart as well as with the head. Too, we must teach the men and women coming into our profession to appreciate their rich heritage.

I should like to close by telling you a story about a family all of us know and love. The name of this family is the Practice of Medicine, and its two sons are called Art and Science. Art is much the older of the two boys, and before Science was born, it was a happy and prosperous family. Even after Science was born, it continued to be a devoted family for a long time. It happens, however, that an unfortunate change has occurred—partiality has been shown toward Science. As a result, he is the robust personable son of the family. Even though he is yet a young man, he has already made his mark in the world, and his future looks bright indeed. Art, on the other hand, feels left out of his own family and suffers from an inferiority complex. He is under-

nourished and anemic; in fact, if something is not done for him, there is a chance that Art may even die. It is your duty and mine to have a heart to heart talk with this family and to persuade it to give Art the same loving and tender care that it is giving Science, to the end that the Practice of Medicine may once again be a united, devoted and happy family.

SUMMER AND POLIOMYELITIS

The summer months and their accompanying heat are always associated with poliomyelitis, commonly called infantile paralysis. The reason for this is not known, but apparently there is something in the rise of weather temperature that fosters the activity of the virus, which causes the disease, the Educational Committee of the Illinois State Medical Society observes in a *Health Talk*.

Fatigue, overexertion and chilling are factors in the development of poliomyelitis. Overcrowded pools and beaches should be avoided, but there is no reason why a child can't swim or play in the water, provided the stay in the water is not so long that the child will get chilled. It has been established that if the virus is present in the body, the chilling tends to lower the body resistance.

Authorities agree that many persons harbor the virus of poliomyelitis, without developing the strong manifestations of the disease themselves, but they are unconscious agents in transmitting the disease. Actually the disease, in its early stages, is difficult to diagnose by the physician because of the absence, very frequently, of symptoms and more often the development of symptoms that are similar to other conditions.

The onset of the disease is rapid. The first stage is comparatively mild. Sore throat, a "head cold," nausea and sometimes vomiting may be among early symptoms. There may be some fever, diarrhea and, conversely, constipation. There may be considerable pain, particularly in the muscles of the legs and arms. The appetite often disappears. Tremor or trembling of the hands and other parts of the body and pain and stiffness of the neck and back are important early symptoms, all of which may occur in almost any combination.

The virus causing poliomyelitis attacks certain nerve cells in the spinal cord which control movement of muscles. When the nerve cells are damaged or completely destroyed, the dependent muscle withers away in the proportion to the amount of nerve damage. If the damage to the nerve cells is slight, the results insofar as crippling are slight. Seriously affected nerve cells do not regrow. When this occurs, the paralysis is permanent.

It is generally conceded in "polio" season that children should not be removed from their normal routine. This is also true of adults. In this day and age complete isolation cannot be achieved, and quarantine in poliomyelitis has not had the expected results. There are some instances of an entire family developing the disease, while in others a single case in a large family has been reported.

Parents should be alert to the slight symptoms of early poliomyelitis. A healthy youngster is not ordinarily listless. Watch for fever and fatigue. Then get the child to bed at once and call your physician.

Be suspicious during "polio" time, but don't get panic-stricken. Avoid crowds, chilling and fatigue, but otherwise try to lead a routine life.

AVOID EXTREMES IN SUNBATHING TO SECURE ATTRACTIVE TAN

For maximum benefits and minimum dangers in sunbathing, these suggestions are offered in an article in the July issue of *Today's Health*, published by the American Medical Association.

1. Start with 10 minutes of exposure to sun on the first day. By increasing exposure time 50 per cent each day, a coat of tan should be acquired safely.

2. It is advisable to continue sunbathing all summer, for the beneficial effects of the ultraviolet rays will continue despite the deepened color of the skin.

3. Morning hours have been found most effective for acquiring sun tan. The hours between 11 a.m. and 2 p.m. are most dangerous.

4. Ultraviolet light may be as intense on misty or cloudy days as in direct sunlight. It can cause severe burning.

5. The notion that skin burns more readily when wet is a mistaken one. Sunbathing in shallow water or on the shore of a lake or the ocean is more likely to produce a burn than sunbathing away from the water, however. The sun's rays are reflected from the water, which intensifies their strength. Reflections from snow or ice are even more potent.

6. Lasting injury may be done if the eyes are not protected from the sun's rays. Dark glasses made of ground glass or several thicknesses of cloth over the eyes may be used.

7. Drinking plenty of water or other liquid when sunbathing is essential. Sunstroke is due to dehydration. Salt tablets are valuable, for salt tends to hold water in the tissues.

8. After a sunbath, be sure to cool off completely before plunging into cold water. Heart attacks sometimes result from such sudden changes, which put too great a strain of adjustment on the circulatory system.

9. Children's skins are more tender than those of adults. Naps and planned diversions in the shade or indoors are excellent for youngsters who tend to play too long in the hot sun.

DOCTORS USE NEW DRUG AGAINST TOXIC GOITER

Promising results in treating patients for toxic goiter with a new synthetic drug, tapazol, are reported by two doctors from Wayne University College of Medicine, Detroit.

These findings should be considered preliminary. The drug has been used in only 13 patients and observations have covered only a six-months period, Drs. William S. Reveno and Herbert Rosenbaum say in the August 19 *Journal of the American Medical Association*.

Tapazol is not now generally available to doctors. Its use is limited to experimental studies.

The drug is an antithyroid compound with action 25 times as powerful as propylthiouracil, a compound commonly used in treating overactivity of the thyroid gland, according to the doctors. Abatement of symptoms occurred in patients with toxic goiter variously five, six and eight weeks after administration of tapazol was begun, according to the article. Two patients who had relapsed after treatment with propylthiouracil were relieved after 57 and 51 days of treatment with tapazol, respectively.

"In the small group of patients observed, tapazol exhibited effective antithyroid activity closely resembling that of propylthiouracil but with a potency approximately 25 times greater," the doctors say, adding:

"Toxic reactions were not encountered, but more time and treatment of a larger number of patients will be required for assessment of this highly important factor."

THE JOURNAL

OF THE
MEDICAL ASSOCIATION OF GEORGIA

EDGAR D. SHANKS, M.D., Editor
478 Peachtree Street, N. E., Atlanta, Ga.

SEPTEMBER, 1950

URGES IMMEDIATE FIRST-AID TRAINING IN CARE OF ATOMIC BOMB CASUALTIES

Immediate training of large numbers of physicians or the public, or both, to care for atomic bomb casualties was urged today by Dr. Everett I. Evans of Richmond, Va., member of the National Research Council's Committee on Atomic Casualties.

"If any large American city suffers atomic bomb attack the numbers of burn casualties will tax all preparations authorities are likely to be able to provide," Dr. Evans pointed out in an article in the July 29 *Journal of the American Medical Association*.

Dr. Evans is professor of surgery and director of the surgical research laboratories at the Medical College of Virginia; surgical consultant to the Atomic Bomb Casualty Commission (Far East Command), Tokyo, Japan; chairman of the National Research Council's Subcommittee on Burns, and a member of the council's Committee on Surgery.

It is now well known that the temperature in the immediate vicinity of an atomic bomb burst may rise to several million degrees, and that even in the "outer zone" radiant heat is dissipated in such large amounts that severe burns result, Dr. Evans said.

"A disturbing feature of all disaster planning for burn care is the seeming complexity of this care even when it is reduced to the barest essentials," he continued. "More disturbing is the plain truth that so few physicians and fewer lay persons are trained in even the simplest methods of burn care.

"One can only conclude that unless proper training (along the simplest lines) of large numbers of physicians and/or the public in burn therapy is instituted at once, the handling of large numbers of burn casualties after bomb attack on any of our cities must necessarily end in complete chaos and panic, with the accompanying inexcusable loss of many lives which otherwise might have been saved.

"The type of trained personnel required for adequate burn care will vary according to the severity of burn to be treated. In the outer zone, the burns may involve mainly the exposed surfaces of hands and face unless they are secondary to ordinary flame. Treatment of such burns can properly be delegated to lay persons. A simple but effective method of treatment to

reduce pain and aimed at prevention of infection of burned parts can easily be taught. Training for large numbers of first aid workers requires relatively little effort and would be highly effective.

"In the intermediate zone, more highly trained and larger numbers of persons will obviously be required. Physicians trained in the therapy of shock and application of a dressing will be needed in large numbers.

"In the zone nearest the bomb burst havoc will prevail. Planning for care of the survivors in this zone must be boldly realistic, lest medical efforts completely lose their effectiveness.

"Any calculation, conservative or otherwise, of the numbers of burn casualties to be expected in atomic attack results in requirements for adequate reserves of plasma and/or whole blood in such large amounts as to make it almost out of question ever to expect such supply for immediate delivery to a stricken city. For this reason alone I consider it imperative that search for a safe, effective, easily stored plasma substitute be started at once."

(Promising research in developing a substitute for plasma has been done by a group of physicians from the Mayo Clinic, Rochester, Minn. A preliminary report on their research with Dextran (Dextran Ph. Swedish trade name), a sugar industry byproduct which has been regarded as a nuisance because it clogs pipes in sugar mills, appears in the July *Archives of Surgery*, published by the American Medical Association.)

"No matter how lightly or how conservatively one views the 'burn problem' which will confront a city recovering from an atomic bomb attack, the one conclusion permissible is that it will be stupendous," Dr. Evans said. "It may be pointless to refer here to the numbers of trained physicians, nurses and first aid workers necessary to solve this problem. Only free men with strong hearts and wills can accomplish the gigantic task of providing by training and discipline the necessary workers. Provision for this training must be made at once, lest contemplation of the magnitude of the task only encourage despair.

"Adequate and intelligent provision for the care of thousands of burned casualties in any large American city is possible when strong men meet the challenge of this task."

COMPOUND F REPORTED EFFECTIVE AGAINST RHEUMATIC ARTHRITIS

A synthesized adrenal hormone chemically similar to cortisone and known as Compound F is proving effective against rheumatoid arthritis, researchers of the Mayo Clinic, Rochester, Minn., said recently.

Announcement of the synthesis of Compound F was made recently by a pharmaceutical com-

pany (Upjohn Company, Kalamazoo, Mich.). The company did not say what this synthesis will mean in terms of production, other than to emphasize that the amount of Compound F available does not allow distribution for other than limited clinical testing at the present time.

The report of trial of Compound F against rheumatoid arthritis was made by Dr. Howard F. Polley (one of the group from the Mayo Clinic who originally reported the effects of cortisone and ACTH against the disease) and Harold L. Mason, Ph.D., in the August 26 *Journal of the American Medical Association*.

"Significant antirheumatic activity was possessed by 17-hydroxycorticosterone (Compound F)," they say. "Minor structural alteration from cortisone occurs in 17-hydroxycorticosterone. Our supply in the last year has permitted trial on one patient, a woman 49 years old, whose severe rheumatoid arthritis had been present three years and who had responded well to cortisone and to ACTH.

"A total of 0.9 gram of Compound F was given intramuscularly in 12 days of metabolic study (March 31 to April 11, 1949, inclusive). Previously confined to a bed or wheel chair, the patient became ambulatory. The sedimentation rate decreased (improved) from 85 to 24 mm. within 12 days. The over-all relief of rheumatoid arthritis was an estimated 60 per cent, as compared with 75 per cent relief from 1.0 grams of cortisone in 10 days and 85 per cent relief from 1.2 grams of ACTH in 12 days.

"In this study a very marked antirheumatic effect is graded as 4, a marked response as 3, a moderate response 2, mild to minimal effects 1, and no effect is grade 0. Results of the administration of cortisone and ACTH served as a standard against which effects of other preparations were compared. The antirheumatic effect of Compound F in this case was classified as grade 3.

"When use of the preparation was discontinued, improvement was lost more promptly than after withdrawal of cortisone or ACTH. While the patient was being treated with Compound F, her appetite became 'very good' but not ravenous.

"Mild facial rounding ('puffiness') occurred after nine days of Compound F in 50 to 100 mg. daily doses. Dull frontal headaches and 'burning of the eyes' also were described by this patient. These symptoms could not be related with certainty to the hormones which were administered. Euphorogenic effects (a feeling of cheerfulness and well being which has been noted after administration of cortisone and ACTH) were not produced.

"Further trials using Compound F are being undertaken."

None of the other preparations tested showed

significant effect against rheumatoid arthritis except extracts of the adrenal cortex.

OVEREATING ATTRIBUTED TO ENVIRONMENT AND EMOTIONS

The important cause of obesity is overeating, which may result from external factors, such as the sight of tempting foods, or from emotional disturbances.

This is brought out by Dr. Max Millman of Springfield, Mass., in an article in the August issue of *Today's Health*, published by the American Medical Association.

(The glands and abnormalities of metabolism also can influence weight in some persons, according to other medical authorities.)

"The bad example set by gluttonous parents is damaging," says Dr. Millman, a specialist in internal medicine and visiting physician at Mercy Hospital and Springfield Health Department Hospital. "Children are more likely than not to follow suit.

"Another powerful environmental cause for overeating is found in our present day social amenities, calling as they do for dinner parties, banquets, cocktail parties and the like. And there is the powerful influence of exposed trays of candy, cookies and nuts in many living rooms, as well as the pastries and desserts displayed so enticingly in the windows of bakeries and restaurants.

"It has been stated aptly that many people overeat because of emotional starvation. They find food a handy gratification. Instead of drowning their sorrows in alcohol, they bury theirs in calories. Many people worry themselves into obesity. The mental angle is portrayed perhaps best of all in the person who, strange as it may seem, employs obesity as a defense mechanism. He clings to his fat because it relieves him from certain responsibilities, such as marriage, an unpleasant job or rough playing with the boys.

"To some people, food symbolizes security. They overeat, therefore, whenever they are troubled by a sense of insecurity. Boredom also may prove conducive to overeating. Sufferers from an inferiority complex may endeavor to bolster their importance with obesity.

"The hazards of obesity are no longer questioned. Life insurance statistics show conclusively that excessive weight not only predisposes its victims to a long list of serious conditions such as diabetes, heart disease and high blood pressure but shortens their life expectancy to a shocking degree. For people between the ages of 45 and 50, as little as 50 pounds of excess weight diminishes their life expectancy by fully 25 per cent."

The Medical Association of Georgia will hold its next annual session at the Bon Air Hotel, Augusta, April 17-20, 1951.

FIND CHLORAMPHENICOL USEFUL AGAINST BACILLARY DYSENTERY

Good results in treating 35 patients for bacillary dysentery with chloramphenicol (chloromycetin, trade name) are reported by a research group from Washington, D. C.

"Diarrhea usually subsided within three days, and an uneventful recovery ensued in all 35 patients," Drs. Sidney Ross, Frederic G. Burke, E. Clarence Rice and John A. Washington, and Sara Stevens, B.S., all of the Research Foundation, Children's Hospital, say in the August 26 *Journal of the American Medical Association*.

Although sulfadiazine also is effective against the disease, its usefulness is limited, they point out. Causative microbes frequently become resistant to sulfa drugs, occasional patients are sensitive to sulfa compounds, and administering sulfadiazine to dehydrated patients in the tropical areas where the disease is most prevalent may be hazardous.

NEW TEST FOR STOMACH CANCER DEvised BY NEW YORK DOCTORS

An ingenious balloon test for cancer of the stomach has been devised by a group of doctors from Cornell University Medical College and New York Hospital, New York.

The process is reported in the August 12 *Journal of the American Medical Association* by Drs. Frederick G. Panico, George N. Papanicolaou and William A. Cooper.

A rubber balloon covered with short pieces of braided silk and attached to the end of a tube is swallowed into the patient's stomach and then inflated, the doctors say. Cells from the stomach lining cling to this balloon "brush". The apparatus is deflated and withdrawn and the cells are removed by washing in a special solution.

The cells are then examined by means of the smear test, developed by Dr. Papanicolaou and in wide use for detecting cancer of the cervix in women. Describing the test, Dr. Papanicolaou says:

"Cells at the surface of the growth tend to be dislodged. A technique for collecting the cellular debris, smearing it upon glass slides, and staining it has been perfected so that the various components may be studied. Interpretation of the smear requires the services of a careful and discriminating cytologist who has had experience in this field."

The balloon test was used in collecting cellular material from the stomachs of 33 patients in whom the diagnosis of a disease was confirmed by surgery, the doctors report. Of this group of 33, 17 had malignant disease and 16 had diseases other than cancer.

Among the 17 patients with cancer, balloon wash smears revealed no malignant cells in two

cases, suspicious cells in one case and malignant cells in 14 cases.

Among the 16 patients with conditions other than cancer, smears were negative for malignant cells in 14. Two specimens were read falsely as suggestive of malignancy.

HIGH STANDARD OF VETERAN CARE CREDITED TO MEDICAL LEADERSHIP

The excellent medical care which the government is providing for war veterans is largely the result of the Veterans Administration's constant adherence to the policy that the program remain under the direction and jurisdiction of medical personnel.

This opinion is expressed by a Special Advisory Group to the Veterans Administration in a report published in the August 12 *Journal of the American Medical Association*. The group, representing all divisions of medicine and surgery and allied activities, was established by Congress for the purpose of advising the veterans administrator with respect to policy. Dr. C. W. Mayo of Rochester, Minn., is chairman.

"As long as the Department of Medicine and Surgery of the VA remains under proper and authoritative medical control this type of superior medical care will always prevail for the veteran," the group reported.

"If the time should come, however, when such control is passed to lay, bureaucratic or political hands, that will be the beginning of deterioration of the program of medical care for the veteran.

"Therefore, it is to the best interest of the American people, the medical profession and the veteran groups always to be on the alert to see that this great enterprise of medical care continues under the direction of highly qualified American physicians. As long as the veterans' organizations continue to insist, as they have in the past, that members of the medical profession conduct this program, it will continue to provide a high type of service."

The group considered the improved quality and the high type of medical service maintained since the end of World War II the more remarkable because the veteran load increased three-fold.

"This remarkable achievement in mass medical care has never been duplicated here or in any other country," it pointed out. "There seems little doubt that the veteran who is entitled to it by law does receive the finest type of medical care in a country where medical science has reached its highest development.

"For this the American medical profession may justly be proud. It could not have been done without the wholehearted cooperation and support of American medicine in general and of medical education in particular. The entire program of gearing the medical care of the veterans to the educational medical plants of

the country and the employment as consultants of the finest medical brains in America have made the program possible."

The group disagreed with the recommendation of the Hoover Commission that all government hospitals be consolidated under a single agency, saying:

"If this should be done it seems unlikely that the veteran would receive any better medical care than at present and it is likely that the quality of medical service would ultimately deteriorate from its present high standard."

Besides Dr. Mayo, the group is composed of the following: Roy R. Kracke, M.D.,* vice-chairman, Birmingham, Ala.; D. A. Boyd, M.D., Rochester, Minn.; G. W. Brugler, M. D., Boston; G. F. Cahill, M. D., New York; A. C. Christie, M.D., Washington, D. C.; E. Cockerill, M.S.S., Pittsburgh; C. C. Coleman, M. D., Richmond, Va.; K. J. Densford, D.Sc., Minneapolis; H. A. Hunscher, Ph.D., Cleveland; W. A. Hunt, Ph.D., Evanston, Ill.; R. A. Kimbrough, Jr., M.D., Philadelphia; D. M. Lierle, M.D., Iowa City; C. F. McCuskey, M.D., Los Angeles; F. M. McKeever, M.D., Los Angeles; W. S. Middleton, M.D., Madison, Wis.; J. S. Rodman, M.D., Philadelphia; A. R. Shands, Jr., M.D., Wilmington, Del.; D. T. Vail, M.D., Chicago, and J. S. Voyles, D.D.S., St. Louis.

*Dr. Kracke died on June 27, 1950.

TERRAMYCIN REPORTED EFFECTIVE AGAINST TWO TYPES OF PNEUMONIA

Results indicate that terramycin, a newer antibiotic drug derived from a mold, is remarkably effective against both pneumococcal and virus pneumonia, a group of New York doctors report in the August 12 *Journal of the American Medical Association*.

Terramycin proved to be valuable in treating 13 patients with pneumonia due to pneumococcus microbes and seven patients with virus pneumonia, Drs. George W. Melcher, Jr., Count D. Gibson, Jr., Harry M. Rose and Yale Kneeland, Jr., of the Columbia University College of Physicians and Surgeons and Presbyterian Hospital say.

"Results indicate that terramycin is remarkably effective in the treatment of both types of infection," the doctors point out.

The drug was administered by mouth in the form of tablets or capsules. Vomiting and nausea occurred in some patients as side effects of terramycin, but these symptoms seemed less severe than similar reactions observed in patients following administration of aureomycin, according to the doctors.

SEVEN TYPES OF INFANTILE DRIVERS BELIEVED TO CAUSE TRAFFIC ACCIDENTS

Seven types of drivers who have never matured emotionally cause many traffic accidents,

according to an article in the July *Today's Health*, published by the American Medical Association.

These infantile driver types and their behavior patterns are described by Marion Gleason, research assistant for the department of pharmacology and toxicology at the University of Rochester, N. Y.:

1. The person who hasn't outgrown the childhood conviction that his wants come first. His parents always sacrificed their own convenience and pleasure to accommodate him. Now he is the middle-of-the-road driver, the double-parker, the horn-blower at intersections.

2. The person who was taught as a child to obey without thinking. He becomes the driver who obeys signals from other drivers automatically and may drive into intersections or pass other automobiles without thought of other traffic.

3. The pampered type frequently is a well-groomed and charming woman. As a child she could get what she wanted by fluttering her lashes and shaking her curls and she uses the same technique with policemen to get away with parking by fire hydrants and driving through stop lights. She rarely has an accident but causes many traffic tangles and occasionally serious crashes.

4. This type was bullied by older brothers and sisters and is the really dangerous driver. He works out his old resentments by speeding and sideswiping other autos.

5. Drivers who were overprotected or severely dominated as children account for a large number of serious traffic accidents. Usually in their late teens or early twenties, they find undertaking responsible adult life difficult. They are show-offs, daredevils, lawbreakers.

6. The type who was allowed to get by with wrongdoing. The childhood feeling of guilt may lead them from bad to worse conduct in an unconscious search for guidance they never received. They accept tickets and pay fines cheerfully. The traffic ticket takes the place of a spanking which the child wanted but never had.

7. The type who was poor and had to make secondhand textbooks and used bicycles do. He has to prove to himself that his standard-make model will get there just as fast as the most expensive custom-made automobile. Although he speeds, he is alert and rarely has an accident. The accidents he causes are those of trembling witnesses after he is half a mile up the road.

The Medical Association of Georgia will hold its 1951 annual session in Augusta. The dates are April 17, 18, 19 and 20. Bon Air Hotel will be headquarters, with Partridge Inn participating. Please make your reservations now.

GEORGIA DEPARTMENT OF PUBLIC HEALTH

TUBERCULOSIS: SUGGESTIONS FOR IMPROVED CONTROL

H. C. SCHENCK, M.D.

Director Division of Tuberculosis Control
Georgia Department of Public Health

Atlanta

In any effort to control tuberculosis the physician engaged in general practice is, or should be, the keystone. At one time or another he comes in contact with almost everyone in the community and this places him in a strategic position to employ modern and accepted methods in detecting tuberculosis. He should also be prepared to accept responsibility for the observation and management of a large proportion of the cases in his community. There is no mystery involved in determining whether a patient has tuberculosis in an active or convalescent stage, nor in planning the observation and management of a case based on knowledge gained at the time the diagnosis is made, nor in observing from time to time the progress of the case.

The rest regimen which should be advised will depend on the degree of activity of the disease at the time the case is being considered. This can be ascertained through clinical study of the patient, and by x-ray studies, sputum examinations and blood sedimentation tests. Other adjuncts to the rest regimen which may be advisable in a given case are not difficult to determine. For example, if a patient with minimal pulmonary tuberculosis, presumably in an active stage but with negative sputum, does not do well on rest in bed and good food, and it is found by x-ray examination that the disease is progressing, something else must be considered immediately. Usually in such instances hospitalization for study and a selected method of treatment are advisable. In the past thousands of patients who were unaware of the fact that they had tuberculosis, healed their lesions without doing anything about it. If the same patients had been treated in sanatoriums, or otherwise, undeserved credit would have been given to the treatment or care received. Before pneumothorax was widely used many minimal and certain moderately and far advanced cases went on to recovery on bed rest alone. The point is that a great many negative sputum cases can get well on bed rest and, moreover, such care may well be arranged for in the home under medical supervision, thus relieving the relatively few sanatorium beds for other very necessary services, particularly for positive sputum cases. They must be kept under close medical supervision, however, so that

any change for the worse or failure to respond to the care given may be detected before serious damage results.

Patients with negative sputum, discharged from sanatoriums, should have the same type of medical supervision as those discussed above and for the same reasons. Careful evaluation of the amount of physical effort a patient may indulge in is of vital importance. The patient must be made to understand that his chance to get well will be jeopardized by any undue exertion and that the process of healing a tuberculous lesion is a long-drawn-out affair. Also, he should know that the development of a new lesion means another year or two of "taking the cure." The family physician should be prepared to give sound advice to his patient so that the latter, having reached a period during his convalescence in which he feels "as well as he ever did", will not be permitted to work or exert himself to a harmful extent, remembering that a long and careful "hardening process" is necessary to prepare him for the resumption of reasonably normal physical activity.

Should the Family Physician Treat Tuberculosis?

Why should the family physician concern himself with the treatment of tuberculosis? Because, first, there are over 10,000 clinically active and convalescent tuberculosis patients in the State and *not one fourth* of them can be hospitalized because of a lack of available institutional facilities; second, there are over a million persons in Georgia who have been infected, many of whom have developed or will develop active tuberculosis; third, many other people are going to be infected because we do not have adequate control of positive sputum cases; and fourth, the more cases that the family physician treats the greater will be the number of positive sputum cases that can be hospitalized until they are sputum free.

The Physician and The Positive Sputum Patient

Only by adequate control of the positive sputum case can tuberculosis be controlled. Every patient who has tuberculosis should be presumed to have a positive sputum if he coughs and raises sputum, or otherwise gets up secretions from the trachea and bronchi, until repeated laboratory examinations prove the sputum to be negative. It should be regarded as essential for the physician to be familiar with the various methods employed by laboratories in making sputum examinations. He should know when he can be satisfied to accept the results of ordinary smear examinations, when to ask for examination of sputum by concentration methods, when for sputum

culture and animal inoculation, as well as the indications for examination of gastric lavage specimens and those who might be secured by bronchoscopic or laryngoscopic methods.

When the patient is found with positive sputum his care in the home is greatly complicated, because there is the added problem of preventing spread of the infection. It is especially desirable from a public health standpoint to have all such patients treated and cared for by *trained* personnel in sanatoriums, State or local. If this is impossible, then every effort should be made to put into practice in the home effective measures to prevent any further spread of the infection. The very sick patient and the terminal case present very dangerous situations and their care can be safely undertaken only by personnel thoroughly trained in the use of effective prevention measures. Bed care, of course, is indicated in all positive sputum cases. Many can be greatly benefited by surgery and other collapse measures, and selected cases may be benefited by the judicious supplementary use of antibiotics. The probable advantage of any procedure in a given case should be carefully weighed against the probable disadvantage before it is undertaken, and if there is still doubt about what treatment should be advised the chest specialist and chest surgeon should be consulted.

Regardless of the number of sanatorium beds the State provides for its citizens, and those made available for Georgia veterans in veterans' facilities, more than 75 per cent of our patients (at least 8,000) must be treated and cared for in their homes or in facilities which may be provided by the community. Few communities have facilities for the care, treatment and control of tuberculosis patients. They must consider what they are going to do to remedy this serious situation. To depend on the State and Federal facilities to be developed to a point of complete adequacy can only result in further delay in developing a real program of tuberculosis case detection, case study, treatment, care and control of infection. The development of local sanatoriums in the larger population centers would be of distinct value.

Those communities which do not participate fully in supplying the things they lack to make tuberculosis control possible will continue to have tuberculosis. To believe otherwise is to ignore what has been happening in the past. Some states with less adequate facilities than ours have experienced a similar or even more rapid decline in the death rate from tuberculosis, while other states that have greater facilities but which do no more than we are doing to control infection in the homes and communities have rates no better than ours. To spend a lot of money for sanatorium treatment and neglect the unhospitalized patient is wasting money.

Summary

The practicing physician, understanding how handicapped the State and local health departments are in efforts to control tuberculosis, can assist in many ways in the local efforts that must be continued. They can and should help in case-finding efforts, in case management, in evaluating the clinical progress of patients, and in guiding them through the long and tedious convalescent period through which active cases must go before their disease may be said to be fully arrested. They can help by recognizing the importance of the spread of infection and preventing reinfection. They can help by reporting every case that comes to their attention as required by law. They can help by informing themselves fully of the extent of the tuberculosis problem in the State as a whole as well as in the city or county in which they live, so that local planning may properly fit into a program which includes the most efficient use of State facilities. They can help by passing this information along to local governments so they may understand what facilities are needed in order that the entire problem may be attacked intelligently.

NEWS ITEMS

Two years ago the Council of this Association authorized the employment of extra secretarial help. At that time conditions in general were not favorable for the employment of a suitable secretary. Part time help has been necessary. Now we are very fortunate in giving Miss Viola Berry, business manager and executive secretary, the help which she has long deserved. Meet, if you please, Miss Battie Eidson, Atlanta, who joins our staff at the headquarters office as of September 10. Miss Eidson knows physicians and their problems, having for many years been secretary to one of Georgia's prominent physicians.

* * *

The American College of Chest Physicians, Southern Chapter, will hold its seventh annual meeting at the Hotel Statler, St. Louis, November 12-13, 1950. Georgia physicians on the program and their topics are: "Bacteriological Diagnosis in Tuberculosis," by Dr. Martin M. Cummings, Atlanta, and "The Surgical Treatment of Asthma, Emphysema, Bullae and Blebs," by Osler A. Abbott, Atlanta. Dr. Carl C. Aven, also of Atlanta, is a member of the Executive Council of the Southern Chapter.

* * *

Dr. Mason Baird, Atlanta, recently attended the International Congress of Ophthalmologist held in London, England. Dr. Baird also visited Holland, Switzerland, Paris and other points of interest while abroad.

* * *

Dr. Needham B. Bateman, Atlanta, announces the association of Dr. Harold A. Ferris, internal medicine, and Dr. Ernest A. Dunbar, Jr., pediatrics, suite 526, Candler Building, Atlanta.

* * *

The Bibb County Medical Society, Macon, recently passed a resolution urging expansion of local hospital facilities in Macon. The resolution called upon the Macon Hospital Commission, Bibb County commissioners, and City Council to take expansion action. The society also welcomed four new members: Drs. Herbert M. Olnick, T. E. Rogers, Jr., B. W. Forester, and J. P. Woodhall.

Dr. Grady E. Black announces the opening of his office in the Masonic Building, Griffin. Practice limited to pediatrics. He graduated from the University of Georgia School of Medicine in 1945 where he was president of the student body his senior year. He served an internship of one year at the University Hospital, Augusta, and then returned there after serving two years in the Army to complete two years of training in pediatrics.

* * *

Dr. J. Gordon Brackett, East Point, announces the opening of his offices at suite 814 Doctors Building, 478 Peachtree St., N. E., Atlanta. Practice limited to ear, nose, throat and broncho-esophagology.

* * *

Dr. Stewart D. Brown, Sr., Royston, recently announced the association of his son, Dr. Stewart D. Brown, Jr., in the practice of medicine. Dr. Brown, Jr., graduated from the University of Georgia School of Medicine, Augusta, and received his training at the Charity Hospital, New Orleans. He served three and a half years in the Medical Corps of the United States Army during the last war.

* * *

Dr. Napier Burson, Jr., Atlanta, announces the opening of his office for the practice of internal medicine and gastroenterology at 34 Seventh Street, N. E., Atlanta.

* * *

Dr. Enoch Callaway, LaGrange, recently was the guest speaker at the First Methodist Church of Hogansville in the absence of the regular pastor, Rev. Carl McGrady. Dr. Callaway is an outstanding lay leader in the Episcopal Church in LaGrange, and appears often as guest speaker in other churches.

* * *

Dr. Grady Coker, Canton, recently announced the sale of his interests in the Coker-Jones Clinic, Canton, to Dr. Arthur Hendrix. Dr. Coker will devote his entire time at the Coker Hospital while Dr. Hendrix will be associated with Dr. Robert T. Jones, III, at the clinic.

* * *

Dr. Joseph B. Cooley, Lithonia, announces the opening of his office in the Stewart Building, Lithonia. He graduated from the University of Georgia School of Medicine, Augusta, and has been practicing medicine in Decatur and Atlanta since his discharge from the Army Medical Corps in 1948.

* * *

Dr. R. L. Carter, Thomaston, recently spent a month at the Tulane Hospital, New Orleans, studying and observing in the Department of Obstetrics and Gynecology. He spent some time at Tulane earlier this year and returned to complete work in his specialty.

* * *

Dr. James H. Crawford, Atlanta, announces the association of Dr. Benjamin M. Chambers at his office, 615 Grant Building, Atlanta. Dr. Crawford will limit his practice to otolaryngology while Dr. Chambers will confine his practice to ophthalmology.

* * *

Dr. Roger W. Dickson, Atlanta, was recently guest at the staff dinner meeting of the Kennestone Hospital, Marietta.

* * *

Dr. J. Leonard Dixon, formerly of Albany, has been named chief of the surgical division of the new Midland, Texas, Memorial Hospital. He is a former assistant professor of surgery at Tulane University School of Medicine. At one time he was chief of surgery for the famed Oschner Clinic in New Orleans. The Midland Hospital is one of the finest to be opened in the Southwest in recent years.

Dr. Vilatan Domancic, a displaced person from Yugoslavia, has joined the medical staff of the Milledgeville State Hospital, Milledgeville, and has been placed in charge of the tuberculosis ward.

* * *

Dr. Ernest A. Dunbar, Jr., Atlanta, announces the opening of his office at 526 Candler Building, Atlanta, and 116 College Avenue, Forest Park. Practice limited to pediatrics.

* * *

The Fifth District Medical Society held its dinner meeting at the Academy of Medicine, Atlanta, September 15. Program: "Pitfalls in the Use of Precision Methods in the Management of Cardiovascular Disease", Dr. Edgar Hull, of Tulane in New Orleans; "Clinical Application of the Artificial Kidney", Dr. John P. Merrill, of Harvard, Boston. The society met in conjunction with the Georgia Heart Association. Dr. Carter Smith, president; Dr. J. H. Byram, vice president, and Dr. L. Minor Blackford, secretary.

* * *

The Floyd County Medical Society, Rome, recently endorsed the program of the County Health Department to require chest x-rays of all food handlers in Floyd County. The x-rays will serve to control the spread of tuberculosis through cooks, waiters, butchers, and others who come in contact with food before it reaches the consumer.

* * *

The Fulton County Medical Society held its semi-monthly meeting at the Academy of Medicine, Atlanta, on August 6. Moderator—Dr. William C. Ward. Program: "Evaluation of Systolic Murmurs on School Examinations", Dr. J. Gordon Barrow; "Late Sequelae of Vena Cava Ligations", Dr. Patrick C. Shea; "An Effective Clinical Method for Determination of the Coagulation Time: Its Value in Detection of Intravascular Clotting", Dr. Roy L. Robertson. Members of the Floyd County Medical Society were special guests.

* * *

The Georgia Chapter of the American Academy of General Practice will hold its annual meeting at the Hotel Dempsey in Macon, on October 26, 1950. There is no registration fee, although the guests will be required to pay for their luncheon. Besides the members, all interested physicians in Georgia are invited to attend. Dr. Joseph Crudup, President of Brenau College, will make the luncheon address. Immediately after the luncheon the scientific program will begin. The speakers are: Dr. D. G. Miller, Jr., of Morgantown, Ky., subject to be announced; Dr. John F. Denton, Atlanta, "Pelvic Pain"; Dr. Thomas L. Ross, Jr., Macon, "Cardiac Emergencies"; Dr. Edwin R. Watson, Macon, subject to be announced (pediatrics); Dr. O. J. Bateman, Jr., Buffalo, N. Y., "Hormonal Therapy of Bone and Joint Disease"; Dr. Robert B. Greenblatt, Augusta, "Uses and Abuses of Hormonal Therapy."

Information concerning this meeting may be obtained from Dr. J. B. Kay, President, Georgia Chapter, Byron, or Dr. Albert R. Bush, Secretary, Hawkinsville.

* * *

The Georgia Medical Society held a special call meeting at 612 Drayton Street, Savannah, August 1. Medical mobilization and the Griffenhagen Report were discussed. Dr. Sam Youngblood, Jr., secretary.

* * *

Dr. Harriett E. Gillette, Atlanta, recently helped with the screening of applicants to the school for cerebral palsied children which opened in Savannah earlier this month. Dr. Gillette interviewed each child seeking to enter the school and its parents to determine if training was advisable. Quarters for the school were

donated by Hansell Hillyer, and consist of property on Broughton Street.

* * *

Dr. Bryce W. Harris, formerly of Brunswick, announces the opening of his offices at 3550 Park Avenue, Memphis, Tenn., for the general practice of medicine.

* * *

Dr. William C. Hathcock and Dr. John H. Reed announce their association in the practice of ophthalmology and otolaryngology at 402 Grand Theatre Building, Atlanta.

* * *

Dr. John H. Hines, formerly of Atlanta, announces the opening of his office at Roswell for the practice of medicine and surgery.

* * *

Dr. J. W. Hurst, Atlanta, Associate Professor of Cardiology at Emory University School of Medicine, recently addressed members of the private duty section of the Fifth District, Georgia State Nurses Association. His topic was: "Recent Advancement in the Management of Heart Disease."

* * *

The Jefferson County Medical Society recently held its meeting at Pilchers Lodge near Stellaville. Guest speakers included Dr. John R. Lewis, Jr., Atlanta, who spoke on "Plastic Surgery"; Dr. Major Fowler, Atlanta, who discussed the "Problems of Urology for the General Practitioner"; and Dr. Reese Coleman, Atlanta, an associate of Dr. Fowler was also a guest at the meeting. Dr. James W. Pilcher, Louisville, secretary.

* * *

Dr. S. P. Kenyon, Dawson, recently announced that his suite of offices will be occupied by Dr. L. E. Dickey, Jr., who will engage in the general practice of medicine and surgery in Dawson. Dr. Dickey graduated from the University of Georgia School of Medicine, Augusta. He interned at the John Gaston Hospital, Memphis, and just completed a year's residency in surgery at the University Hospital, Augusta. He served in the United States Navy during World War II.

* * *

Dr. G. Lombard Kelly, Augusta, president of the Medical College of Georgia, recently announced that Dr. John B. Brittain has been added to the faculty of the Medical College of Georgia as assistant professor of pharmacology. Dr. Brittain will work under Dr. Raymond P. Ahlquist.

* * *

The Kennestone Hospital, Marietta, has announced that qualified doctors everywhere in the state are welcome to practice there. Recently they opened their facilities to three Atlanta urologists, Drs. Charles Eberhart, James H. Semans, and Donald E. Beard. Mr. Walter T. Altmann, administrator of the hospital, said that "the Hospital Authority will keep outside doctors coming in until Marietta's needs have been filled." The hospital finished in the red after its first month of existence because of insufficient doctors and patients.

* * *

Dr. Bernard S. Lipman, Atlanta, announces the opening of his offices at 663 West Peachtree Street, N. E., Atlanta. Practice limited to internal medicine and cardiology.

* * *

Dr. Wood W. Lovell, Atlanta, announces the opening of his office at 803 Medical Arts Building, Atlanta. Practiced limited to orthopedics.

* * *

The Macon-Bibb County Health Center recently announced that Dr. Z. E. Greer, of Cordele has been named assistant health officer and Mr. C. M. Graham, Jr., of Bulloch County has been assigned to the center

as a trainee. Dr. R. Frank Cary, Macon, made the announcement. Dr. Greer, a graduate of the University of Georgia School of Medicine in 1944, replaces Dr. E. H. Prescott who left last December to become health officer at LaGrange. Mr. Graham will train at the center for three months before he is reassigned by the state health department.

* * *

Dr. Rollo J. Mincey, Jr., Milledgeville, recently announced his association with Dr. L. A. Bailey at the Scott Hospital, Milledgeville. He graduated from the University of Georgia School of Medicine in 1943 and interned at the Macon Hospital, Macon. Later he served 27 months with the Army before entering into general practice at Conyers for one year. He just completed two years residency in obstetrics and gynecology at St. Joseph's Infirmary and Grady Memorial Hospital, Atlanta.

* * *

Dr. J. B. H. Minchew, Waycross, recently presented a paper entitled "Advances in Surgery of the Eye" at the Ware County Medical Society meeting. A movie showing the new method of cataract extractions was shown. "Malnutrition in the Hospital Patient" was part of the clinical program arranged by Dr. Ansley Seaman in a movie pointing up the importance of caloric intake to maintain a balanced nutritional status to assure rapidity of recovery. Dr. W. F. Reavis, president-elect of the Medical Association of Georgia, presided in the absence of Dr. W. A. Hendry, president. Drs. A. W. DeLoach and Walter E. Lee, Jr., were hosts to the supper meeting at the Hotel Ware. Guests included Dr. Neal Youmans, Jesup, and Dr. M. D. Clayton, Waycross.

* * *

Dr. J. Phillip Muse, Brunswick, recently attended the Southern Pediatrics Conference at Saluda, North Carolina.

* * *

Dr. J. H. Nicholson, Madison, recently resumed his medical practice after an absence of three months spent on a tour of duty with the Medical Corps at Fort Benning. He will continue to serve on the surgical staff of McGeary Hospital in Madison and the Minnie G. Boswell Memorial Hospital in Greensboro.

* * *

Dr. Rufus Payne, superintendent of Battey State Hospital, Rome, recently announced that a new 70 bed ward had been opened up, bringing the total number of beds to 1,600. Another ward of similar capacity is expected to be opened up shortly. The hospital had only 500 beds when it opened in 1946. Dr. Payne said that applications still greatly exceed the space available, despite the increase in beds. Twenty-five doctors and 212 nurses are on the staff of the hospital.

* * *

Dr. Thomas J. Peacock, Milledgeville, superintendent of the Milledgeville State Hospital, recently gave a first-hand report on the big institution to the Rotary Club of Brunswick. He cited statistics concerning the number of patients, discharges, and other operating routines. However, the high point of his remarks came when he detailed the procedure followed by a surgeon in the so-called "ice pick operation" to correct certain types of mental disorders. Dr. J. W. Simmons, Brunswick, introduced Dr. Peacock.

* * *

Dr. Quinton R. Pirkle, Hoschton, recently opened an office with Dr. William Matthews at 3894 Peachtree Road, Brookhaven. Dr. Pirkle will limit his practice to surgery. He graduated from Emory University School of Medicine and interned at Piedmont Hospital in Atlanta. After serving three years in the Navy, he

returned to the VA Hospital, Columbia, S. C. to serve a residency on surgery.

* * *

Dr. T. E. Rogers, Jr., Macon, announces the opening of his office for the practice of obstetrics and gynecology at 700 Spring Street, Macon.

* * *

Dr. S. E. Sims, formerly of Atlanta, recently began his duties as a member of the staff of Jordan Hospital, Eatonton. He graduated from Emory University School of Medicine and interned at Grady Hospital in Atlanta. After spending two years in the Navy he returned to Atlanta to become assistant resident in surgery at Grady Hospital.

* * *

Dr. H. Wilder Smith, Swainsboro, recently attended the Southern Pediatric Seminar at Saluda, N. C. He graduated from the University of Georgia School of Medicine, Augusta, in 1946 and served a year of internship at Duval County Hospital, Jacksonville, Fla.

* * *

Dr. J. Gregg Smith, formerly of Gainesville, recently was appointed Lowndes County Health Commissioner by the Lowndes County Board of Health. Previously he had served in a similar capacity at Hall County. A graduate of the Medical College of Virginia, Richmond, Dr. Smith served almost 27 years in the Navy before retiring to enter into the field of public health.

* * *

Dr. William A. Steed, Augusta, recently announced the opening of his offices at 305 Tenth Street, Augusta. Practice limited to diseases of the eye, ear, nose, and throat. He graduated from the University of Georgia School of Medicine, Augusta, and served a rotating internship at Atlanta's Grady Memorial Hospital. Afterwards he served four years in the army with overseas duty in France, Belgium, and Germany and was discharged with the rank of major. Dr. Steed then went back to Grady Hospital to take three years of residency training in eye, ear, nose, and throat work.

* * *

Dr. Virgil P. Sydenstricker, Augusta, was recently appointed medical consultant to the Georgia Training School for Mental Defectives at Gracewood. Dr. Sydenstricker is also Physician-in-Chief of the University Hospital, and professor of medicine at the Medical College of Georgia, Augusta. During the last war he served as advisor to the British ministry of health and was awarded the King's Medal for his survey of the nature of nutritional deficiencies in the British Isles.

* * *

The Tenth District Medical Society held its meeting at the City Hall, Madison, August 17. Program: "Anesthesia in the Small Hospital", Dr. Perry P. Volpitta, Augusta; "An Outline of Some of the Newer Therapeutic Measures in Medicine", Dr. David R. Thomas, Augusta; "Nonpenetrating Injuries of the Abdomen", Dr. Thomas Goodwin, Augusta; "Medical Public Relations", Mr. Richard J. Eales, Atlanta; Discussion, followed by Short Business Session. Dr. A. M. Phillips, Macon, President of the Medical Association of Georgia, and Dr. Stephen T. Brown, Atlanta, Chairman of the Public Relations Committee of the Medical Association of Georgia also spoke. Following the adjournment, a barbecue was held for the doctors and their wives.

* * *

Dr. Russell Thomas, Americus, Chairman of the Sumter County Board of Health, recently called a meeting of the board to discuss problems concerning the improvement of health services in Sumter County. It was decided that eating places should be inspected and improved as the first steps in erasing the health problems in Americus and Sumter County.

The Toombs County Medical Society met in Vidalia on August 23. Dr. Harold P. McDonald, Atlanta, spoke on "The Prostate Gland."

* * *

Dr. R. A. Vonderlehr, Atlanta, medical director in charge of the U. S. Public Health Service Communicable Disease Center, recently announced the appointment of Dr. Sidney Olansky, of Washington, D. C., as director of the venereal disease research laboratory in Atlanta. For the past two years Dr. Olansky has been in the private practice of dermatology and syphilology besides serving as clinical instructor in medicine at George Washington and Georgetown medical schools. He is a native of Boston, Mass.

* * *

Drs. Exum Walker and William W. Moore, Atlanta, announce the association of Dr. James R. Simpson in the practice of neurological surgery at 133 Doctors Building, Atlanta.

* * *

Dr. H. Eugene Weems, formerly of Macon, announces the opening of his office in the Crowe Building, Sylvester. He is associated with Dr. Norman J. Crowe in the practice of medicine. A graduate of the University of Georgia School of Medicine, Augusta, Dr. Weems is a veteran of four years service with the Navy during and after World War II.

* * *

Dr. M. W. Williams, Camilla, who has been ill for over a month, recently reopened his office with Dr. A. A. McNeil, Jr., in charge. Dr. McNeil, a native of Cairo, graduated from the University of Georgia School of Medicine, Augusta, and spent two years at King County Hospital, Brooklyn, N. Y., on a rotating surgical internship. Later he returned to the same hospital for one year's residency training in pathology.

* * *

Dr. Peter B. Wright, Augusta, recently spoke before the Augusta Kiwanis Club on the causes, effects, and treatments of cerebral palsy. Dr. Wright is medical adviser for the Augusta area of the Georgia Cerebral Palsy Society. Miss Clara Greene, chief pharmacist at the Medical College of Georgia, made a short talk explaining the work of the newly-organized Augusta chapter of the Georgia Cerebral Palsy Society. A motion picture showing work being done in a cerebral palsy school was also shown. Dr. H. W. Hankinson introduced the speakers.

* * *

The Fulton County Medical Society held its semi-monthly meeting at the Academy of Medicine, Atlanta, August 17. Moderator, Dr. C. W. Strickler, Jr. Program: "Hypersensitivity and the Adrenal Cortex," Dr. William F. Friedewald; Discussion led by Dr. Philip K. Bondy; "Some Dangers in Use of the Miller Abbott Tube," Dr. Charles S. Jones; Discussion led by Dr. J. W. Veatch, Jr.

* * *

The Ware County Medical Society held its meeting at the Ware Hotel, Waycross, August 3. Dr. H. Ansley Seaman presented the clinical program. Films on operation of a patient for "milk leg" were shown. The operation which showed ligation of the large femoral vein where the blood clot forms in the vein pointed up how this particular type operation prevented the clot from moving up to the heart, lung or brain, thus preventing fatality. This operation technic reduced the time of illness and restored the patient to normal activity, it was shown. Dr. Floyd E. Davis was elected to the directorship in the vacancy of the Waycross Blood Bank when Dr. Ed Roe Stamps, director, moved to Macon. Dr. Dexter Clayton was welcomed as a new member by Dr. W. F. Reavis, president-elect of the Medical Association of Georgia. Dr. W. A. Hendry, president, presided over the meeting to which Drs. Ansley Seaman and Floyd E. Davis were hosts.

COMMUNICATIONS
FOURTH NAVAL DISTRICT

District Staff Headquarters
U. S. Naval Base, Philadelphia 12, Pa.

12 June 1950

E. D. Shanks, M.D., Secretary,
Medical Association of Georgia,
478 Peachtree Street, N. E.,
Atlanta 3, Georgia.

My dear Dr. Shanks:

To keep military Reserve Medical Officers of the Armed Forces, Army, Navy and Air Force posted on the latest developments in the field of medical science, a Medico-Military Symposium for officers of the Fourth Naval District will be held at the U. S. Naval Hospital, Philadelphia, Pa. from October 23 to 28.

Commodore Richard A. Kern, MCR, USNR, Professor of Medicine, Temple University School of Medicine, and chairman of the symposium General Committee, has announced that Rear Admiral Clifford A. Swanson, MC, USN, Surgeon General of the Navy, will open the meetings with an address on "The Physician as a Naval Officer."

Officers attending the symposium will be welcomed by Rear Admiral Roscoe E. Schuirmann, Commandant, of the Fourth Naval District; Brig. General Leonard E. Rea, USMC; Captain Clyde W. Brunson, MC, USN, Commanding Officer of the Philadelphia Naval Hospital; and Captain J. R. Thomas, Fourth Naval District Medical Officer.

Speeches and panel discussions are scheduled in aviation medicine, national defense in case of disaster or attack, national preparedness, psychiatry, submarine medicine, surgery and orthopedics. Physicians selected to head the panels include Brig. Gen. James P. Cooney, Chief, Radiology Branch, Division of Military Application, Atomic Energy Commission; Dr. Perrin Long, Professor of Medicine, Johns Hopkins University; Captain John Poppen, MC, USN; Captain George Lyons, MC, USN; Rear Admiral C. J. Brown, MC, USN; Captain C. W. Schilling, MC, USN; Dr. Frank Braceland; Dr. Joseph Hughes, Dr. Edward Strecker and Dr. Christian J. Lamberton.

It is urged that officers make hotel reservations well in advance, since no government housing facilities will be available. The final session of the symposium will be held Saturday morning, October 28, leaving the afternoon free for officers to attend the Penn-Navy football game.

The attendance to this symposium is not restricted to Medical Officers of the Armed Forces. All members of the Medical Profession are cordially invited to attend.

Would you be so kind as to publish this invitation of this medical meeting in the *Journal*?

Sincerely yours,

M. H. PORTERFIELD,

Commander, MCR, USNR

Assistant to Dist. Medical Officer,
Naval Medical Reserve Program.

American Urological Association
Atlantic City, N. J., July 15, 1950

Dr. Edgar D. Shanks, Editor

Journal of the Medical Association of Georgia.

478 Peachtree St., N. E.

Atlanta 3, Ga.

Dear Dr. Shanks:

Please publish in the forthcoming issue of your journal the following notice:

"Urology Award"—The American Urological Association offers an annual award of \$1,000.00 (first prize of \$500.00, second prize \$300.00 and third prize \$200.00) for essays on the result of some clinical or laboratory research in Urology. Competition shall be limited to urologists who have been in such specific practice for not more than five years and to men in training to become urologists.

"The first prize essay will appear on the program of the forthcoming meeting of the American Urological Association, to be held at the Palmer House, Chicago, Illinois, May 21-24, 1951.

"For full particulars write the Secretary, Dr. Charles H. de T. Shivers, Boardwalk National Arcade Building, Atlantic City, New Jersey. Essays must be in his hand before February 10, 1951."

Yours very truly,

COMMITTEE ON SCIENTIFIC RESEARCH

Miley B. Wesson, Chairman

Anson L. Clark

John E. Heslin.

GEORGIA HEART ASSOCIATION

The Georgia Heart Association held its Second Annual Meeting September 15 and 16 in conjunction with the annual meeting of the Fifth District Medical Society, in the Academy of Medicine and the Biltmore Hotel in Atlanta.

The meeting featured nationally known authorities on heart disease and a round-table discussion, "The Layman Looks at Heart Disease", in which outstanding leaders in the fields of education, agriculture, industry, labor and civic affairs posted questions to the visiting speakers.

Guest speakers and their topics were: Dr. Tinsley R. Harrison, Professor of Medicine, University of Alabama School of Medicine, who spoke on "Unusual Aspects of Chest Pain"; Dr. James Shannon, Research Director, National Heart Institute, Bethesda, Maryland, on "Trends in Cardiovascular Research"; Dr. John Merrill, Peter Bent Brigham Hospital, Harvard University, "The Role of The Artificial Kidney in Cardiovascular Diseases"; Dr. Edgar Hull, Professor of Medicine, Louisiana State University, "The Choice of Leads in Clinical Electrocardiography"; and Dr. Eugene Ferris, Associate Professor of Medicine, University of Cincinnati, spoke on "The Diagnosis and Management of Hypertension".

According to Dr. T. Sterling Claiborne, president of the Georgia Heart Association, more than 300 physicians from Georgia and neighboring states were present.

ROENTGENOLOGISTS WILL HOLD 50th
ANNIVERSARY MEETING IN ST. LOUIS

The American Roentgen Ray Society, which is composed of physicians who specialize in x-ray diagnosis and treatment, will hold its 50th anniversary meeting in St. Louis, September 26-29.

It was 50 years ago this year that a small group of doctors gathered in St. Louis to organize a society "whose principal purpose would be the study of the roentgen rays and their application to medicine and science." This society became known as the American Roentgen Ray Society.

The scientific sessions and the scientific and commercial exhibits will be held in the Hotel Jefferson in St. Louis.

This year's Caldwell lecture will be delivered on Wednesday, September 27, by Dr. Henry L. Bockus, professor and chairman of the Department of Internal Medicine in the Graduate School of Medicine, University of Pennsylvania, Philadelphia. His subject will be "The Role of Roentgenology in Gastroenterology."

The convention program is being arranged by a committee headed by President-elect B. P. Widmann, M.D., of Philadelphia.

The society president is Dr. U. V. Portmann, of Cleveland.

The JOURNAL would like to record the scientific work of Georgia physicians. It earnestly requests, therefore, that each physician in the State who publishes a contribution in some other medical periodical submit an abstract of the article for these columns.

EMORY UNIVERSITY SCHOOL OF MEDICINE

in cooperation with

THE MEDICAL ASSOCIATION OF GEORGIA

announces the third annual

Postgraduate Course In Medicine and Surgery For General Practitioners

October 9 through 13, 1950

THE course is designed to present current ideas concerning the diagnostic and therapeutic problems of general practice. The course can also be used in meeting part of the requirements for membership in the American Academy of General Practice.

Registration Fee - \$10.00

MONDAY, OCTOBER 9

9:00- 9:15	Announcements
9:15-10:00	Diabetic Coma..... <i>Dr. L. Harvey Hanff</i>
10:00-10:45	Pulmonary Embolism..... <i>Dr. J. Gordon Barrow</i>
	<i>Intermission</i>
11:00-11:45	Myocardial Infarction..... <i>Dr. J. Willis Hurst</i>
11:45-12:30	Heart Failure..... <i>Dr. R. Bruce Logie</i>
12:30- 1:00	Question Period (<i>Cardiology</i>)
2:00- 3:30	Thyroid Disease
	Medical Aspects..... <i>Dr. Philip K. Bondy</i>
	Surgical Aspects..... <i>Dr. D. Henry Poer</i>
	<i>Intermission</i>
3:45- 5:15	Chronic Pulmonary Disease
	Medical Aspects..... <i>Dr. F. Levering Neely</i>
	Surgical Aspects..... <i>Dr. Osler A. Abbott</i>

THURSDAY, OCTOBER 12

9:00-10:30	Problems in Hematology..... <i>Dr. Charles M. Huguley, Jr.</i> <i>Dr. Milton H. Freedman</i>
	Therapeutic Agents in Anemia
	Infectious Mononucleosis
	The Lymphomas
	<i>Intermission</i>
10:45-11:45	The Lymphomas (Continued)
	Round Table Discussion on Hematology
11:45- 1:00	Clinicopathological Conference..... <i>Dr. David F. James</i> <i>Dr. Walter H. Sheldon</i> <i>Dr. William H. Grimes</i> <i>Dr. John R. McCain</i>
2:00- 2:45	Prenatal Care..... <i>Dr. William H. Grimes</i>
2:45- 3:30	Fetal Distress in Labor..... <i>Dr. John R. McCain</i>
	<i>Intermission</i>

TUESDAY, OCTOBER 10

9:00- 9:45	Infectious Diseases.....	<i>Dr. Paul B. Beeson</i>
9:45-10:30	Adrenal Hormones.....	<i>Dr. Philip K. Bondy</i>
	<i>Intermission</i>	
10:45-11:30	Chronic Glomerular Nephritis.....	<i>Dr. Arthur J. Merrill</i>
11:30-12:15	Arthritis.....	<i>Dr. Max Michael, Jr.</i>
12:15- 1:00	Infectious Polyneuritis.....	<i>Dr. William A. Smith</i>
2:00- 2:45	Meningitis in Infants and Children.....	<i>Dr. Richard E. Boger</i>
2:45- 3:30	Diphtheria.....	<i>Dr. Stacy W. Burnett</i>
	<i>Intermission</i>	
3:45- 4:30	Biochemical Disturbances in Renal Failure in Children.....	<i>Dr. Andrew C. Austin</i>
4:30- 5:15	Round Table <i>Presiding—Dr. Roger W. Dickson</i>	

WEDNESDAY, OCTOBER 11

9:00- 9:45	Constipation.....	<i>Dr. T. Sterling Claiborne</i>
9:45-10:30	Diarrhea.....	<i>Dr. E. Napier Barson, Jr.</i>
	<i>Intermission</i>	
10:45-11:30	Cerebrovascular Accidents.....	<i>Dr. Richard B. Wilson</i>
11:30-12:15	Uremia.....	<i>Dr. Arthur J. Merrill</i>
12:15- 1:00	Skin Diseases of Young Individuals.....	<i>Dr. Herbert S. Alden</i>
2:00- 2:45	Postmenopausal Bleeding.....	<i>Dr. John B. Cross</i>
2:45- 3:30	Treatment of Incomplete Abortions.....	<i>Dr. John M. Hood Ridley</i>
	<i>Intermission</i>	
3:45- 4:30	Leukorrhea.....	<i>Dr. George A. Williams</i>
4:30- 5:15	Sterility in the Female—Management of the Infertile Couple.....	<i>Dr. Samuel R. Poliakkoff</i>

3:45- 4:30	Postpartum Infections.....	<i>Dr. Marion T. Benson, Jr.</i>
4:30- 5:15	Indications for Cesarean Section.....	<i>Dr. Charles B. Upshaw</i>

FRIDAY, OCTOBER 13

9:00-10:30	Early Diagnosis of Cancer.....	<i>Dr. J. Elliott Scarborough</i> <i>Dr. Samuel A. Wilkins, Jr.</i>
	<i>Intermission</i>	
10:45-11:30	Varicose Veins.....	<i>Dr. Frederick W. Cooper, Jr.</i>
11:30-12:15	Cholecystography.....	<i>Dr. H. Stephen Weens</i>
12:15- 1:00	X-Ray Diagnosis of Intestinal Obstruction.....	<i>Dr. Ted F. Leigh</i>
2:00- 2:45	Swelling of Scrotal Contents.....	<i>Dr. Milus K. Bailey</i>
2:45- 3:30	Fractures of the Hip.....	<i>Dr. Robert P. Kelly</i> <i>Dr. H. Walker Jernigan</i>
	<i>Intermission</i>	
3:45- 4:30	Infections of the Hand.....	<i>Dr. W. Cleveland Ward</i>
4:30- 5:15	The Surgical Gallbladder.....	<i>Dr. Ira A. Ferguson</i>

Detach slip below to make application for enrollment.

To: Director of Postgraduate Education
Emory University School of Medicine
36 Butler Street, S. E.
Atlanta 3, Georgia

Please enroll me in the Postgraduate Course for General Practitioners, October 9-13, 1950.

NAME

ADDRESS

OBITUARY

Dr. Judge J. Bridges, aged 81, retired Atlanta physician, died at his home, 458 Haas Ave., S. E., Atlanta, after a long illness, July 25, 1950. Dr. Bridges was born in Jackson County, Georgia the son of the late Rev. W. H. Bridges and Angeline Randolph Bridges. He graduated from the University of Georgia School of Medicine, Augusta, in 1891, and later did postgraduate work at Tulane University of Louisiana School of Medicine, New Orleans, La. Beginning medical practice in Trion, he later moved to Bethlehem where he married Miss Rose Elizabeth Bedingfield in 1895. After several years' practice in Bethlehem, Bogart and Auburn, he moved to Atlanta. At this stage of his medical career he became famous as a typhoid fever and pneumonia doctor as well as a pediatrician. Dr. Bridges was a member of the Baptist Church and of the Odd Fellows. Surviving are his wife; six sons, Fred T., Horace G., and Dr. Glenn J. Bridges, all of Atlanta; Ralph W. Bridges, Modesto, Calif.; John Bridges, Birmingham, Ala.; and Roy D. Bridges, Lithonia; three daughters, Mrs. V. C. Durham, Savannah; Mrs. Guy Malcom, Athens, and Mrs. Forrest Manghon, Atlanta; three sisters, one brother; fifteen grandchildren, and five great-grandchildren. Funeral services were held at the Moreland Avenue Baptist Church with the Rev. W. H. Barrett and the Rev. B. W. Hancock officiating. His sons served as pallbearers. Burial was in Greenwood Cemetery, Atlanta.

* * *

Dr. William Harold Campbell, aged 84, prominent Columbus physician who retired five years ago, died August 10, 1950. Dr. Campbell was born in Harris County, Georgia the son of the late Philander J. and Martha Zachary Campbell. He graduated from the Louisville Medical College, Louisville, Ky., in 1891, and had practiced medicine in Columbus for 50 years. Dr. and Mrs. Campbell celebrated their fiftieth wedding anniversary in 1944. He was a member of the First Baptist Church. Survivors include his wife, the former Miss Mary Lou White; a son, Hal Campbell, Columbus, a daughter, Mrs. W. H. Willingham, Columbus, and three grandchildren. Funeral services were held at the Striffler Chapel with the Rev. W. Howard Ethington officiating. Burial was in Riverdale Cemetery, Columbus.

* * *

Dr. Marian E. Farbar, aged 69, for 16 years resident physician at Valdosta State College (formerly the Georgia State Woman's College), died May 4, 1950. Dr. Farbar was born in Otoe County, Nebraska, in 1881. She received her Registered Nurse's degree at the Chicago Baptist Hospital, Chicago, in 1905 and her M.D. degree from the University of Illinois College of Medicine, Chicago, Ill., in 1910. She interned at the Deaconess Hospital, Spokane, Wash., and did postgraduate work at the University of Chicago College of Medicine, Chicago, and Cornell University Medical School, New York City. Following her internship, Dr. Farbar went to India as a medical missionary, where she served for six years. After her return from India, she was in general practice in the United States until 1926, when she went into the field of Health Education at Ann Arbor, Mich., and at Earlham College, Richmond, Ind. Dr. Farbar went to Valdosta State College in 1934, when she served as resident physician and as a teacher in the biology department. She contributed articles to various medical journals and was mentioned in one of Paul DeKruif's books for her research in brucellosis. She served at one time as secretary-treasurer of the South Georgia Medical Society, of which she was a member. She was also a member of the Medical Association of Georgia, a fellow of the American Medical Association. She was a member of the Baptist Church. Survivors include two sisters, Miss Frances Farbar, Chicago, Ill., and

Mrs. L. R. Smith, Orlando, Fla.; a brother, Jerome Farbar, Houston, Texas. A memorial service was held in Valdosta with the Rev. Clifton H. White officiating. Cremation was in Orlando, Fla.

* * *

Dr. Edward Rutledge Freeman, aged 34, Columbus physician, was found shot to death in his office at 1340 Fourth Avenue, July 22, 1950. He was born in Phenix City, Ala., where he had lived all his life. He was the son of the late Millard Berry Freeman and Myrtice Rutledge Freeman. Dr. Freeman was graduated from Emory University School of Medicine, Atlanta, in 1943. He interned at the City Hospital, Columbus. He was a member of the Muscogee County Medical Society, the Medical Association of Georgia and a fellow of the American Medical Association. Survivors include his wife; two daughters, Myrtice Ann and Frances Freeman; a brother, M. B. Freeman, Jr.; a nephew, Billy Freeman, and several uncles and aunts. Funeral services were held at Oaklawn Chapel with the Rev. R. J. Haskeew officiating. Honorary pallbearers were members of the Muscogee County Medical Society. Burial was in Riverdale Cemetery, Phenix City, Ala.

* * *

Dr. Emory G. Lower, aged 47, Atlanta physician and former Georgia Tech instructor of 619 Myrtle Street, N. E., Atlanta, died in a private hospital, July 25, 1950. Dr. Lower, a native of New Virginia, Iowa, was an instructor in biology at Georgia Tech until about eight years ago when his increasing medical practice forced him to give up teaching. The Atlanta physician was a member of Beta Kappa Phi medical fraternity, and was a graduate of the University of Tennessee College of Medicine, Memphis, Tenn., in 1937. He did postgraduate work at University of Chicago, Chicago, Ill. He was a member of the Fulton County Medical Society, the Medical Association of Georgia, the Southern Medical Association, and a fellow of the American Medical Association. He was a member of the North Avenue Presbyterian Church and a Mason. Surviving are his wife, Mrs. Jeannette V. Lower, Atlanta; his mother, Mrs. Elsie Lower, Atlanta; a sister, Mrs. Malcolm Betha, Birmingham, Ala.; and two brothers, Howard Lower, Atlanta, and Donald Lower, Fredericksburg, Va. Funeral services were held at Spring Hill with Dr. W. C. Robinson and Dr. Thomas Anderson officiating. Burial was in East View Cemetery, Atlanta.

WANTED—Roentgenologist for mental hospital. Attractive salary and partial maintenance. Two excellent colleges in immediate vicinity. Submit full information, three references and small photograph in first letter. Address Superintendent, Box 325, Milledgeville, Ga.

SURGEON WANTED—A modern progressive South Georgia town is now building a 30-bed hospital, which will be completed in the near future. Will serve fifteen to twenty thousand people. Badly need a surgeon with experience, since there is not one in the county. Write, JMAG, 478 Peachtree St., N. E., Atlanta, Ga.

FOR RENT OR LEASE: Modern building, equipped as 10-bed hospital for surgical, obstetrical and general practice. Also may be used as offices. Located in South Georgia. For full information, write Medical Placement and Mailing Service, 768 Juniper St., N.E., Atlanta, Ga.

THE JOURNAL OF THE *MEDICAL ASSOCIATION OF GEORGIA*

PUBLISHED MONTHLY under direction of the Council

Vol. XXXIX

Atlanta, Georgia, October, 1950

No. 10

PERITONEAL DRAINAGE

J. BENHAM STEWART, M.D.

Macon

Since the early days of medicine there has been constant discussion on the subject of drainage. On many occasions a paper has been written which seemed definitely to establish a form of treatment. Shortly thereafter another paper would be published with equally good arguments for the opposite method of treatment. It is the purpose of this discussion to try to establish some general principles with regard to drainage of the peritoneal cavity. Steinberg, in his recent book on abdominal injuries and their treatment, stated that the aim of peritoneal drainage is fourfold: (1) to avoid the development of abscess; (2) to control bleeding by pressure of a foreign body; (3) to prevent extension of infection; and (4) to remove the circumscribed products of inflammation. There is considerable question as to whether any of these aims are actually accomplished by drainage except under certain specialized conditions.

A general review of the literature for the past few years shows that most authors are opposed to drainage of the peritoneal cavity except for specific indications, particularly the presence of localized abscess or some localized infection which it is desired to prevent from spreading. It is, however, equally obvious that despite the papers written on the subject and the widespread condemna-

tion of drainage in the literature, most surgeons resort to this procedure more frequently than is considered necessary in the literature, and many of them use drains in almost every case of abdominal surgery. The question arises whether the literature on the subject is more theoretical than practical, or whether, knowing the facts in the case, we surgeons do not have the courage to follow what we know to be correct.

Many observers, such as Kirk, Miller, Shipley and Bailey, believe that drainage in early peritonitis not only does nothing toward relieving the condition, but also actually interferes with healing. Animal experimentation has proved that, in the dog at least, drains do not prevent formation of an abscess; furthermore, they actually contribute to the formation of abscesses locally at the site of the drain. It is known that even multiple drains placed throughout the abdomen in the case of peritonitis do not drain the peritoneal cavity. Experiments have been performed which show that if the source of infection is removed or stopped, forty-eight to seventy-two hours after a generalized peritonitis the peritoneum will be free of infection and of adhesions except at the site of the drain. There infection still remains, and relatively dense adhesions exist. When the peritoneum is closed tightly in animals with approximately the same infection, the peritoneal cavity is completely clear at this time without even the local infection that existed when drainage was employed. Also, the mortality rate in animals following drainage of the peritoneal cavity in severe infections is almost 100

per cent, whereas stopping the leak and closing the abdomen tightly produces a fairly high percentage of recovery. The available statistics on mortality in the human with and without drainage are almost identical.

The healing process in the body takes place first by the outpouring of polymorphonuclear leukocytes, which combat the infection, killing off the causative organisms and rendering others inactive. These cells then act as phagocytes, taking away the debris of their fellow cells and the destroyed organisms together with other cellular debris caused by the battle. With drainage, these particularly needed leukocytes are allowed to flow out of the body along the course of the drain. This loss not only weakens the body mechanism for killing the organism, but materially hinders the cleaning up process which follows. There also is some question whether we can assume that all motion along the drainage highway that we establish is going to be in one direction. It seems impossible that we could establish a one way highway whereby pathogenic organisms would come out of the body and none would enter. Certainly the dressing around a wound provided with drainage cannot be free from contamination from without.

In 1905 Yates performed a great deal of experimental work in regard to drainage of the peritoneal cavity. His investigations proved conclusively that in the normal peritoneum drainage occurs around the tube for approximately six hours, but that in a diseased peritoneal cavity the length of the period of drainage is much shorter. After this initial six-hour period the drainage tube is effectively sealed within a small tract. The adhesions about the tube become more and more dense the longer it remains in place, and the portion drained is merely that small area which immediately sur-

rounds the tube. There is considerable evidence to show that the tube itself acts as a foreign body, producing inflammation and inviting bacterial contamination whether any existed previously or not.

At an earlier time, in 1897, Clark analyzed 1,700 cases at Johns Hopkins University. He concluded that not only is drainage useless, but in many cases actually harmful.

Cottis reported that a careful search of the literature failed to reveal any instances in which a surgeon who had adopted the policy of nondrainage in cases of generalized peritonitis ever reverted to the use of drains. He stated that the great danger from peritonitis is not the infection itself but the mechanical intestinal obstruction or ileus that complicates it. From his experience as Chief of Surgical Service, Jamestown General Hospital, and from his survey of the literature, he concluded that obstruction is more common in those cases in which drainage is employed than in others. He believed that if the source of the infection can be removed and if the peritoneum is intact, that is, has no areas denuded, primary closure in the peritoneum without drainage is the method of choice.

Dixon, Martin and Ochsner, in discussing peritonitis, assumed that everyone is in favor of closing the peritoneum without drainage. They added one feature which in my limited experience has proved especially valuable, and that is the placing of a small Penrose or rubber dam drain down to the peritoneum in the wound after the peritoneum has been tightly closed. In the presence of contamination of the peritoneum and of local or generalized peritonitis, it is almost impossible to prevent some infection from contaminating the wound at the time of operation. It is likewise impossible to sterilize the wound after the peritoneal cavity has been closed. Since there is no

peritoneal lining of the wound, and there is usually bruised muscle in the wound, it makes an ideal place for an infection to flourish. This likewise is not a large cavity, and drainage is desired only around the point which can actually be touched by the drain. This drain should be removed in stages beginning approximately forty-eight hours after completion of the operation.

Dr. Fraser B. Grud of McGill University condemned hard rubber drains and glass tube drains and also stated that the peritoneal cavity cannot be drained, but in any case in which there is infection he advocated the placing of massive packs soaked in liquid paraffin and bismuth and iodoform paste into every portion of the peritoneal cavity around the intestines. He added that he makes no attempt to close the abdominal incision, but waits approximately forty-eight to seventy-two hours, at which time the infection has in his experience been completely cleared. The packs are then removed with the patient asleep, and the wound is closed without drainage. Dr. Grud believed that if there is the slightest doubt, the peritoneal cavity should be packed as described. I have found no other reference in the literature to such therapy. Although he considers it to be the ideal form of treatment and reports almost no mortality with it, it seems somewhat radical.

In reporting on the results in 936 cases of acute appendicitis, Tashiro and Zinninger discussed a previous report in which they concluded that, unless extensive necrosis or actual fecal contamination of the peritoneal cavity is present, it is better to close the peritoneum and drain the wound down to it. In the earlier paper they gave as reasons for such a procedure:

1. Wounds in which the peritoneal cavity has been drained are prone to hernias.
2. Drains form a portal of entry for infection from without.

3. Drains are foreign bodies and may stimulate adhesions, which may result in intestinal obstruction.

4. The obtaining of drainage from remote portions of the peritoneal cavity by drains is unlikely.

These authors related that the results in their series of 936 cases seem to indicate that this form of treatment needs some revision. They agreed with the opinion that drains in the pelvis or paravertebral gutter cannot drain distant portions of the peritoneal cavity, but they were of the opinion that it drains localized pockets of pus, and that in cases of definite contamination there are fewer pelvic abscesses following drainage. In the cases of ruptured appendix in which the peritoneum was closed tightly, pelvic abscesses developed in 24.1 per cent, whereas in the cases in which drainage was employed such abscesses developed in only 12.1 per cent. While these figures do not coincide with the other figures given in this discussion, a further study of their paper reveals that in those cases in which there was drainage, the mortality rate was 12.1 per cent, but in those in which there was no drainage it was 8.6 per cent.

Statistics in any paper or discussion are useless unless all of the facts are at hand, and usually these facts are not presented in the discussions. For example, Tashiro and Zinninger reported the percentages of cases with drainage but did not describe specifically the details and their reasons for draining in each case. Likewise, in regard to the percentages on mortality, it is not known how serious the condition was in each of the fatal cases before the operation was performed. It would be necessary to know at least these facts in order really to evaluate the figures given. This is, however, a large series of cases and the report comes from an excellent clinic, so there is added one more link in the already confusing

chain of discussions on the subject of drainage in peritoneal contamination.

Summary

In the literature much evidence has accumulated on both sides of the question of drainage. The consensus of opinion from the leading clinics over the country at the present time is, however, that unless there is definite localized pus or a highly localized massive contamination of the peritoneal cavity, it is better to close the peritoneum tightly and drain the wound.

BIBLIOGRAPHY

1. Buchbinder, J. R.; Droegemueller, W. A., and Heilman, F. R.: Experimental Peritonitis; Effect of Drainage on Experimental Diffuse Peritonitis, Surg., Gynec. & Obst. 53:726-729 (Dec.) 1931.
2. Bunch, G. H., and Doughty, R.: Treatment of Acute Appendicitis, Ann. Surg. 106:42-48 (July) 1937.
3. Cafritz, E. A.: Nondrainage of the Peritoneal Cavity in Appendiceal Peritonitis, J.A.M.A. 108-1315-1317 (April 17) 1937.
4. Clairmont, P., and Meyer, M.: Erfahrungen uber die Behandlung der Appendicitis, Acta chir. Scandinav. 60:55-134, 1926.
5. Clark, J. G.: A Practical Application in Abdominal Surgery of Scientific Investigations on the Function, Anatomy, and Pathology of the Peritoneum, Univ. Pennsylvania M. Bull. 14:87-90, 1901.
6. Cottis, G. W.: The Fallacy of Peritoneal Drainage, Am. J. Surg. 60:204-208 (May) 1943.
7. Dixon, J. L.; Martin, G., and Ochsner, A.: Treatment of Abdominal Injuries; Review of Eighty-Eight Personal Cases, Am. J. Surg. 68:143-163 (May) 1945.
8. Gurd, F. B.: The Operative Treatment of Acute Appendicitis with Perforation, Canad. M. A. J. 27:360-367, 1932.
9. Gurd, Fraser B.: A Specific Technique for the Treatment of Acute Perforated Appendicitis, Am. J. Surg. 17:52-58 (July) 1932.
10. Kirk, R. D., Jr.: Treatment of Acute Peritonitis, New Orleans M. & S. J. 83:76-80 (Aug.) 1930.
11. Lewis, D., and Penick, R. M., Jr.: Fecal Fistulae, Internat. Clin. 1:111-130 (March) 1933.
12. Marchini, F.: L'abolizione del drenaggio nelle peritoniti purulente circoscritte e diffuse, specialmente da appendicite, Arch. ital. chir. 28:549-602, 1931.
13. Miller, H. C.: The Problem of Draining the Peritoneal Cavity, Nebraska M. J. 15:401-404 (Oct.) 1930.
14. Shambaugh, P., and Boggs, R.: Peritoneal Drainage; Resistance of the Sinus Tract to Infection, Arch. Surg. 30:1032-1035 (June) 1935.
15. Shipley, A. M.: Editorial: Drainage of the Peritoneal Cavity and Intestinal Obstruction, Surg., Gynec. & Obst. 60:1016-1017 (May) 1935.
16. Shipley, A. M., and Bailey, H. A.: Treatment of Appendicitis Complicated by Peritonitis, Ann. 96:537-544 (Oct.) 1932.
17. Steinberg, B.: The Cause of Death in Acute Diffuse Peritonitis, Arch. Surg. 23:145-156 (July) 1931; correction 23:356 (Aug.) 1931.
18. Steinberg, Bernhard: Infections of the Peritoneum, New York, Paul B. Hoeber, 1944.
19. Sworn, B. R., and Fitzgibbon, G. M.: Analysis of 2126 Cases of Acute Appendicitis, Brit. J. Surg. 19:410-414 (Jan.) 1932.
20. Tashiro, S., and Zininger, M. M.: Appendicitis; Review of 936 Cases at the Cincinnati General Hospital, Arch. Surg. 53:545-563 (Nov.) 1946.
21. Warren, R.: Primary Closure of the Peritoneum in Acute Appendicitis with Perforation; Report of Twenty Cases, Ann. Surg. 110:222-230 (Aug.) 1939.
22. Yates, J. L.: An Experimental Study of the Local Effects of Peritoneal Drainage, Surg., Gynec. & Obst. 1:473-492, 1905.

THE COLOR OF FECES FOLLOWING THE INSTILLATION OF CITRATED BLOOD AT VARIOUS LEVELS OF THE SMALL INTESTINE

J. H. HILSMAN, M.D.

Atlanta

The purpose of this report is to present data on the color of feces following the introduction of citrated blood into the human small intestine at various levels. The experiments were undertaken to determine whether or not reliance could be placed on the color of the feces in the localization of a bleeding lesion.

Work done by Schiff and his associates¹ on the introduction of large and small amounts of blood into the normal stomach has shown that the resulting stools can be either bloody or tarry. They found that when citrated venous blood was introduced into the stomach, as by drinking, that at least 100 to 200 cc. were required to produce a tarry stool. Under the same circumstances, but using fresh blood, Daniel and Egan² showed that at least 50 to 80 cc. were required. This seems to imply, therefore, that a bleeding gastric lesion must bleed at least about 75 to 100 cc. in order to cause the ultimate production of a tarry stool.

On the other hand, when Schiff et al¹ gave large amounts of citrated venous blood (one to two liters) per gastric tube to his subjects, the resulting stools were either bloody or tarry. Three out of four subjects given a liter of blood had no tarry stools whatever, but had bloody stools. Three subjects that did pass a tarry stool, regardless of the amount of blood that was given, did so in 20 hours or more; those that passed bloody stools did so in 17 hours or less. Schiff concludes that a grossly bloody stool does not

¹Read before the Medical Association of Georgia in annual session, Macon, April 19, 1950.

necessarily indicate that the blood is entering the intestinal tract low in the small intestine or in the colon.

In this small intestinal study, the subjects were patients from the usual hospital ward, both medical and surgical; none of the subjects had a history of gastrointestinal bleeding or were receiving iron or bismuth therapy. Each was intubated with a double-lumen Miller-Abbott tube under fluoroscopic guidance. When any doubt existed as to the location of the tip of the tube, a small amount of a thin suspension of barium in water was introduced, the site identified, and the barium aspirated. Then, 200 cc. of recently outdated bank blood*, containing 0.68 grams of sodium citrate, were introduced through the tube into the predetermined section of the small or large intestine. The color of the first and second stools containing gross evidence of blood and the time

of the passage of each after the introduction of the blood were recorded.

In certain instances it was desirable to speed the rate of passage of the blood. This was accomplished by the subcutaneous injection of 5 mg. of urecholine³ every two hours until the first blood-containing stool was passed. On other occasions an attempt was made to delay the transport time by the subcutaneous or oral administration of 0.85 to 1.28 mg. of atropine sulfate⁴ every three hours.

Results (Table 1).

a) *Blood instilled into the upper intestine*: When the blood was instilled into the duodenum, jejunum, or upper ileum of 7 patients, the color of the resulting stools was black in 4 instances (Cases 14, 23, 24, and 26), dark brown with a reddish tint in 1 (Case 19), and bright red in 2 (Cases 7 and 10).

TABLE 1
Description of Patients and Results—Small Intestine

Case No.	Age/Sex	Level of instillation of blood	Time of passage of first blood-containing stool after instillation of blood (hours).	Color of first blood-containing stool
1	66/M	Low ileum	1	Bright red
2	34/M	Duodenum	2'	Bright red
3	68/F	Terminal ileum	3	Dark red
4	60/M	Jejunum	4'	Bright red
5	68/F	Low ileum	4	Dark red
6	38/M	Terminal ileum	4	Bright red
7	48/F	Upper ileum	5	Bright red
8	65/F	Duodenum	6'	Dark red
9	29/M	Upper ileum	6'	Dark red
10	52/M	Upper ileum	8	Bright red
11	39/M	Mid-ileum	9	Dark brown with red tint
12	20/F	Mid-ileum	12	Dark brown with red tint
13	70/M	Mid-ileum	13	Dark brown with red tint
14	42/F	Duodenum	14	Black
15	38/M	Mid-ileum	15"	Dark brown with red tint
16	30/M	Terminal ileum	15	Black
17	42/F	Low ileum	17"	Dark brown with red tint
18	47/F	Terminal ileum	18	Black
19	52/M	Upper ileum	19	Dark brown with red tint
20	60/F	Mid-ileum	20	Dark brown with red tint
21	66/M	Terminal ileum	20	Dark brown with red tint
22	52/F	Terminal ileum	20	Dark brown with red tint
23	36/M	Upper ileum	21	Black
24	33/F	Upper ileum	24	Black
25	31/F	Low ileum	27	Bright red (pinkish)
26	33/F	Jejunum	29	Black
27	57/F	Mid-ileum	34"	Black

*Dark red in color.

In those 4 instances in which the color was black, the time between the instillation of the blood and the passage of the stool ranged from 14 to 29 hours in contrast to a transport time of 5 and 8 hours respectively in the 2 cases in which the stool color was bright red.

When the transport time of the blood instilled into the upper small intestinal tract of 4 patients was purposely hastened by urecholine, the color of the stools was bright red in 2 instances (Cases 2 and 4) and dark red in the remaining 2 (Cases 8 and 9). All stools were passed in 2 and 6 hours after the instillation of the blood.

b) *Blood instilled into the mid-ileum:* When the blood was instilled into the mid-ileum of 4 patients (Cases 11, 12, 13, and 20), the color of the stools was dark brown with a reddish tint; these were passed in 12 to 20 hours, except in Case 11, in which the stool was passed in 9 hours. When the transport time of 2 patients (Cases 15 and 27) was apparently prolonged by atropine, the color of the stool passed in 15 hours was dark brown with a reddish tint (Case 15), whereas that passed in 34 hours was black (Case 27).

c) *Blood instilled into the lower ileum:* When blood was instilled into the lower or terminal ileum of 10 patients, the color of the stool was black in 2 (Cases 16 and 18), dark brown with reddish tint in 3 (Cases 17, 21, and 22), dark red in 2 (Cases 3 and 5), and bright red in 3 (Cases 1, 6, and 25). The black stools were passed in 15 and 18

hours; the dark brown with reddish tint, in 17 to 20 hours; the dark red, in 3 and 4 hours; and the bright red, in 1 to 4 hours. The stool of one patient (Case 25), passed in 27 hours, was pink in color and consisted of a mixture of blood and barium. Only one patient in this group (Case 17) received atropine.

Comment. The results clearly indicate that when a given amount of blood is introduced into the small intestine, the color of the faces passed thereafter would appear to depend not on the level at which the blood is introduced, but on the length of time the blood remains within the intestinal lumen. The longer the blood remains in the intestine, the darker is its color when passed in the stool.

In the observations made, the same amount of blood was instilled in all instances. Had larger amounts been introduced, even into the upper intestinal tract or stomach, the color of the stools passed may well have been red instead of black as a result of rapid transport due to hyperperistalsis induced by a larger bulk. It is not an uncommon experience that at times the color of stools passed by patients with massive hemorrhage from a duodenal or gastric ulcer is definitely red. This is possible, as there is not sufficient time for alteration to take place from red to black, either because the blood passes through the small intestine too quickly or because there is such a large amount present the mechanism for alteration is overwhelmed.

TABLE 2
Description of Patients and Results—Colon

28	36/M	Cecum	2	Bright red
29	56/M	Cecum	6 (?)	Dark red
30	52/F	Cecum	11	Dark red
31	45/F	Ascending colon	17	Dark red
32	28/M	Prox. Transv. Colon	22"	Bright red
33	42/F	Cecum	60"	Black

' Urecholine used in an attempt to shorten the time of passage of the blood through the intestinal tract.
" Atropine used in an attempt to prolong the transport time.

A limited number of experiments were performed upon the colon. When blood was instilled into the cecum of 4 patients (Table 2), the color of the stool in two of them (Cases 29 and 30) passed successively in 6 to 11 hours, was dark red, and that of one (Case 28), passed in 2 hours, was bright red. In one patient (Case 33), who received atropine and in whom the transport time was 60 hours, the color of the stool was black. Two additional patients had blood instilled into their colon, into the ascending colon of one (Case 31) and into the proximal transverse colon of the other (Case 32). The color of the feces passed thereafter in each was red, despite the fact that the blood in both remained within the colon a sufficiently long time for alteration to take place. This finding suggests that the mechanism for changing the color of the blood from red to black probably operates orad to the ascending colon, most probably in the small intestine. However, the number of experiments performed on the colon is too small to permit general conclusions. It is planned to study this aspect of the problem further.

Summary

1. Observations have been made on the color of the stools passed after a given amount of citrated blood was instilled at various levels of the human small intestine.
2. The results indicate that under the conditions of the experiment the color of the feces depends on the length of time the blood remains in the small intestine rather than on the level at which the bleeding occurs. The longer this time, the more likely is the stool to be black.

REFERENCES

1. Schiff, L.; Stevens, R. J.; Shapiro, N., and Goodman, S.: *Am. J. Md. Sci.* 203:409 (March) 1942.
2. Daniel, W. A., and Egan, S.: *J.A.M.A.* 113:2232 (Dec.) 1939.
3. Starr, L., and Fergusson, L. K.: *Am. J. M. Sc.* 200:372 1940.
4. Elsom, K. A., and Drossner, J. L.: *Am. J. Digest. Dis.* 6:589 (Nov.) 1939.

GASTROINTESTINAL ALLERGY

Remissions in Chronic Eczema Following Administration of Phthalanilic Acid.

JOHN L. JACOBS, M.D.

Atlanta

It is well known that many cases of chronic eczema do not give positive skin tests when tested with the usual inhalant and food antigens. During the past year we have observed that many of these cases give strongly positive skin reactions when tested with *Escherichia coli*. However, such bacterial reactions are common also in individuals not suffering from eczema,¹ being roughly comparable in incidence to reactions to Endo's concentrated house dust extract,² thus making it difficult to evaluate the relationship between the skin hypersensitivity to the colon bacillus and the eczema.

In order further to study this possible relationship, from a series of 26 successive patients with a chief complaint of eczema, 8 were selected who showed a dominant (large in comparison to that produced by other sensitizing agents) skin reaction to *Escherichia coli*. These patients were treated with phthalanilic acid. Phthalanilic acid has been found to reduce the number of intestinal coliform organisms;³ is poorly absorbed, rapidly excreted by the kidneys and of low toxicity.⁴ Three or 4 grams daily appear to be sufficient if taken at intervals of 8 hours,⁵ and administration of the drug may be continued without ill effects for considerable periods of time. This series of 8 patients, whose skin reactions to *Escherichia coli* ranged from 10 to 28 mm. in diameter, is presented in Table 1.

The patients, ranging from 11½ to 72 years of age, suffered from severe, chronic

From 490 Peachtree Street and the Medical Service of Grady Memorial Hospital, Atlanta.

Read before the Medical Association of Georgia in annual session, Macon, April 19, 1950.

TABLE 1

Results of Treatment with Phthalanilic Acid in Selected Eczema Cases Hypersensitive to *Escherichia coli*. 3 to 4 grams of phthalanilic acid (sulphathalidine) were administered daily to each patient for the period indicated.

Patient	Diameter of skin reaction to <i>E. coli</i> Age		DESCRIPTION OF ECZEMA		Medication	Results
	mm.	yrs.	Extent	Appearance		
P. E.	14	72	Face and extremities	Weeping on legs, rest dry	Phthalanilic acid	Completely clear in 6 wks.
W. E.	13	70	Extremities and body	Dry, scabby excoriated patches	Phthalanilic acid; Vit. B complex	Gradual improvement; almost entirely clear in 6 mos.
G. B.	28	36	Fingers of both hands	Red, weeping, or vesicular	Phthalanilic acid	Completely clear in 2 wks.
K. F.	10	1¼	Face, ears, popliteal and antecubital spaces	Red, papular, coalescent	Phthalanilic acid	Almost completely clear in 3 wks.
H. W.	27	20	Arms, ears, neck, breast, left popliteal space	Red, papular, dry	Phthalanilic acid	Markedly improved in 2 wks.
B. J.	12	23	Arms, hands, face and neck	Annular, or solid, dry	Phthalanilic acid	Almost completely clear in 2 wks.
F. M.	12	58	Arms, hands, legs, feet	Red, dry or weeping in solid areas	Phthalanilic acid Bile salts	Completely clear in 3 wks.
G. C.	15	21	Palmar surfaces of both hands	Red, eczematous patches	Phthalanilic acid and minerals	Markedly improved in 6 wks.

eczema involving large skin areas for which the usual methods of treatment had been of little benefit. The extremities were involved more frequently than other parts of the body, and the appearance of the eczema varied greatly in each case. The substances other than phthalanilic acid used in the treatment of several cases (bile salts, vitamins, and minerals) were not effective when given alone. Skin tests were performed by the intracutaneous injection of a suspension containing 5,000 million organisms per cc. (Hollister-Stier) and the average diameter of the reactions, observed about 24 hours after injection, was approximately 16.3 mm. For controls an equal number of consecutive cases with asthma, hayfever or vasomotor rhinitis only, chosen alphabetically from our files, were similarly tested (Table 2) and showed much smaller reac-

TABLE 2

Hypersensitivity to *Escherichia coli* in controls with severe hay fever, vasomotor rhinitis or asthma, with no history of eczema, angioneurotic edema, urticaria, gastrointestinal allergy or severe constipation.

Patient	R. L.	C. O.	C. M.	K. A.	M. L.	M. E.	M. J.	N. J.
Age	44	19	21	27	19	47	15	50
Allergy	Vasomotor rhinitis	Asthma	Asthma, Vasomotor rhinitis	Asthma	Asthma, hay fever	Hay fever	Asthma, Vasomotor rhinitis	Asthma
Diam. of skin reaction to <i>E. coli</i> in mm.	0	4	0	10	8	12	6	9

tions, averaging only approximately 6.1 mm. in diameter. Patients with eczema, angioneurotic edema, urticaria, or gastrointestinal disturbances of probable allergic origin were excluded from this control series. Skin reactions to *Escherichia coli* in eczematous individuals were, roughly, almost 3 times the diameter or 9 times the area of those in the controls, indicating that the reactions observed are due to hypersensitivity and not simple irritation.

As may be seen from Table 1 the clinical improvement of these cases following administration of phthalanilic acid was striking, especially in view of the intractable nature of the conditions treated. The two oldest patients showed the slowest improvement. In 5 cases (P. E., H. W., K. F., G. B., and G. C.) after the skin was practically clear, treatment with phthalanilic acid was discontinued, whereupon the eczema returned. On resuming treatment the eczema again improved. For example patient P. E. was first given phthalanilic acid, for extensive eczema of the face and extremities on Oct. 18, 1948. On Nov. 11 he had greatly improved, and by Dec. 2, after about 6 weeks of treatment, was practically clear. Phthalanilic acid was then omitted and he did well for about a month, following which the eczema gradually reappeared, until on Feb. 24, 1949, the skin of the extremities was again red and rough, with many eczematous papules, often in patches. Phthalanilic acid therapy was then resumed and by Mar. 31, about 6 weeks later, his skin was again practically clear. The case of G. B. is more striking because her responses to therapy and relapses were more rapid. This patient, after other unsuccessful treatments, was given phthalanilic acid for eczema of the fingers on Nov. 15, 1948. In less than two weeks her skin was entirely clear, and treatment was discontinued. Until about April 20, 1949, she did fairly well, but

then relapsed, and returned May 24 with severe eczema of the fingers. Phthalanilic acid therapy was recommended and by June 7 her fingers were clear, and treatment discontinued. On June 13 her fingers started breaking out again with numerous small vesicles, and on June 16 phthalanilic acid treatment was resumed. By June 19 her hands were improving rapidly, and by June 23 practically clear. These observations strongly suggest that in these cases administration of phthalanilic acid had a beneficial effect on the eczema.

Eczematous individuals not hypersensitive to *Escherichia coli* would be highly desirable as controls, but are difficult to find, as hypersensitivity to the colon bacillus is very common. In our series of 26 cases we had one such individual who was not improved by treatment with phthalanilic acid, indicating that, so far as our observations go at present, administration of phthalanilic acid is not useful in eczema unless hypersensitivity to *E. coli* is present. This assumption is reinforced by observations on the 4 patients of this series whose tests showed very prominent or dominant allergies to foods in addition to hypersensitivity to the colon bacillus. Two of these patients showed no improvement on phthalanilic acid, one showed slight improvement, and one marked improvement. The last two cases were given elimination diets at the same time as phthalanilic acid, so that the improvement noted was not necessarily due to the drug. In spite of this, of the five control cases either not hypersensitive to *E. coli* or with additional strong hypersensitivities to food demonstrable of skin tests only one, or 20 per cent, showed marked improvement on administration of phthalanilic acid, as compared with 100 per cent of our series of 8 cases in which hypersensitivity to the colon bacillus was dominant. This suggests that phthalanilic acid was helpful only in cases hyper-

sensitive to the colon bacillus, and that the mechanism of action may have been reduction in the number of coliform organisms in the intestinal tract. Further controls of this type are under study.

Of the above series of 26 cases 10, or 38 per cent, gave a history of severe chronic constipation. Of the 8 patients shown in Table 1 with a dominant hypersensitivity to *E. coli* 5, or 62 per cent, had severe constipation, whereas of the remaining 18 eczema cases only 3, or 16 per cent, fell into this group. This suggests a possible association between hypersensitivity to the colon bacillus and constipation, which would not be unexpected inasmuch as allergy of the colon might well increase spasticity of that organ. Of these 10 cases, 6 reported more regular bowel movements following administration of phthalanilic acid or related compounds; in the other 4 cases the results were not noted. Interpretation of such improvement is difficult as phthalanilic acid has a laxative effect on some individuals. Further study of this subject is being carried out.

Of the above 26 eczema cases 7, or approximately 27 per cent, also gave a history of urticaria. Of the 8 individuals with a dominant hypersensitivity to *E. coli* 3, or 37 per cent, had had urticaria; of the remaining 19 patients 4, or 21 per cent, fell into this group. There appeared, therefore, some tendency for urticaria to be associated with hypersensitivity to the colon bacillus. In these patients the association of urticaria and constipation was very striking. Five of the 7 patients with a history of urticaria, or 71 per cent, were also in the group of 10 individuals with severe constipation; one gave a history of occasional constipation and one had normal bowel habits. This would seem to be additional evidence of a possible relationship between urticaria and hypersensitivity to *E. coli*, since in this

series severe constipation occurred much more frequently in individuals with a dominant hypersensitivity to *E. coli*.

Summary

The above findings suggest that a close relationship exists between administration of phthalanilic acid and improvement of eczema in a certain group of individuals characterized by a dominant hypersensitivity to *Escherichia coli*. The incidence of such cases (8 of 26 consecutive cases of eczema, or approximately 30 per cent) is high in this small series which, if confirmed, would indicate that hypersensitivity to the colon bacillus may be an important factor in allergic eczema. This might explain why many cases of chronic eczema do not give positive skin tests when tested with the usual inhalants and food antigens. These individuals also appear to have a high incidence of chronic constipation, with which urticaria is often associated.

REFERENCES

1. Swineford, O., Jr., and Holman, J.: *J. Allergy*, 20:292, 1949.
2. Faulkner, D. T., and Jacobs, J. L.: Unpublished Observations.
3. Miller, A. Katherine: *J. Nutrition*, 29:143, 1945.
4. Mattis, P. A.; Benson, W. M., and Koelle, E. S.: *J. Pharmacol. & Exper. Therap.* 81:116, 1944.
5. Bargen, J. A.: *M. Clin. North America* 30:919, 1946.

CARBOHYDRATE STUDIES IN PATIENTS WITH ADDISON'S DISEASE TREATED WITH TESTOSTERONE PROPIONATE AND CORTISONE*

HARLEY E. CLUXTON, JR., M.D.

Savannah

Introduction: The normal adrenal cortex produces several different steroid hormones, some of which, like desoxycorticosterone, act to maintain a normal salt and water balance; others, like corticosterone and allied substances, compounds A and E (corti-

*This is a part of the metabolic study of the effects of testosterone propionate in Addison's disease which was done at the Mayo Clinic in 1948 as partial fulfillment of the requirements for the degree of Master of Science in Medicine given by the University of Minnesota.

Dr. Cluxton, Director of Medical Research, Armour Laboratories, Chicago, Ill., as of October, 1950.

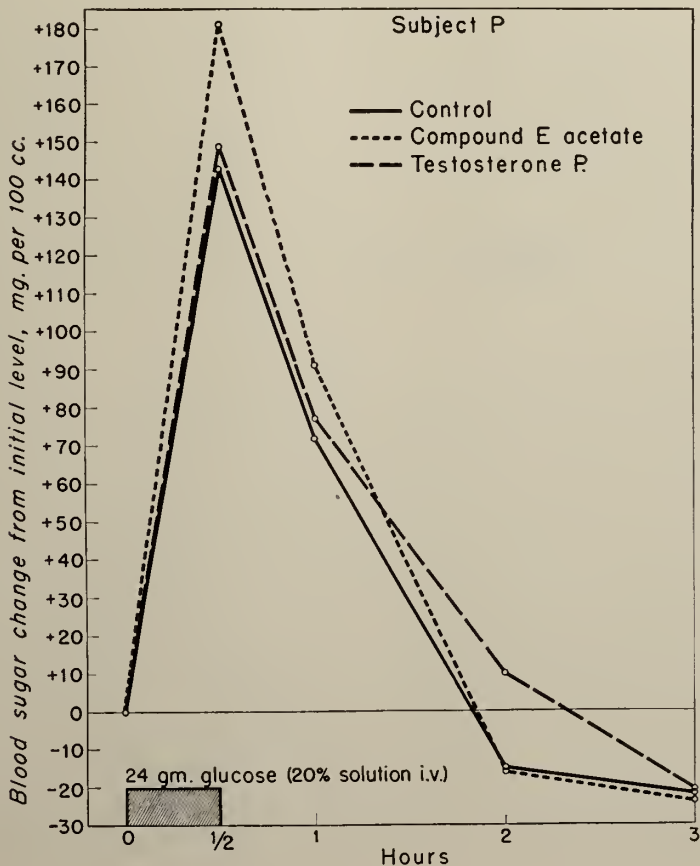
Read before the Medical Association of Georgia in annual session, Macon, April 19, 1950.

sone), have effects on carbohydrate metabolism, and a third group which has androgenic effects. The treatment of Addison's disease with desoxycorticosterone acetate, since it is concerned only with the metabolism of salt and water, leaves much to be desired in the correction of the abnormal metabolism in this disorder. A number of the steroids of the adrenal cortex resemble testosterone in many respects both chemically and physiologically. When testosterone propionate is given intramuscularly to the human there occurs regularly a depression in the urinary excretion of nitrogen, inorganic phosphorus, sulfate, sodium, potassium and chloride and a gain in body weight due to retention of water and salt in association with increased protein anabolism. The effect of testosterone propionate on carbohydrate metabolism in adrenal cortical insufficiency merits further investigation. A detailed metabolic study of 3 pa-

tients with Addison's disease was carried out. However, in this report only the pertinent data on the carbohydrate effects of testosterone propionate and cortisone are included.

The patients: The 3 patients selected for this study were classical examples of Addison's disease. Each had had his or her disorder for a considerable period of time and had been studied on several occasions before the study was undertaken. All had adequate renal function as manifested by normal blood urea levels. Studies of liver function which included the van den Bergh reaction, bromsulfalein dye retention, thymol turbidity, cephalin-cholesterol flocculation, as well as serum protein and albumin-globulin ratios were all normal.

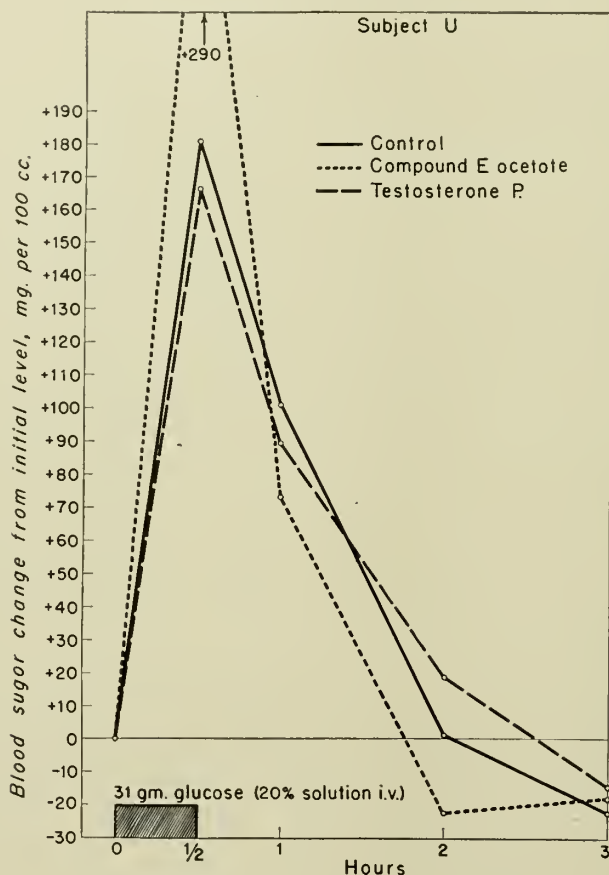
The first patient (Subject P) was an 18 year old female who had had Addison's disease since July, 1947. At this time she was in a mild crisis of adrenal cortical in-



sufficiency. Her history, physical findings and laboratory data were classical. The basis for her disease was presumed to be adrenal cortical atrophy. Her symptoms eventually were controlled with 2 mg. of desoxycorticosterone acetate and 5 gm. of salt per day. She had continued in good health.

of 3 mg. daily and has remained in good health.

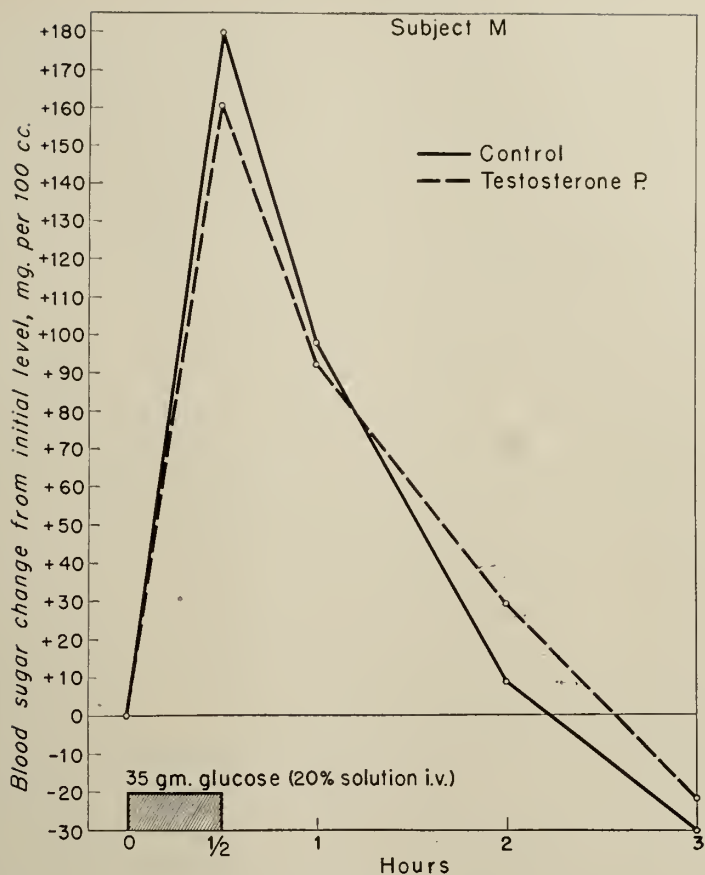
The third patient (Subject M) was a 26 year old male with Addison's disease since the summer of 1946. The diagnosis was made in February, 1947. His history and physical findings were typical of Addison's disease. The laboratory data supported the



The second patient (Subject U) was a woman, aged 41 years, who had Addison's disease of nine years' duration, presumably due to bilateral adrenal cortical tuberculosis. The right kidney was removed in 1935 because of renal tuberculosis. The onset of her Addison's disease was insidious until 1939, at which time she presented the characteristic clinical picture. Subsequent laboratory studies had been compatible with the diagnosis of adrenal cortical insufficiency. She had been treated for the most part with desoxycorticosterone acetate in a dose

clinical impression. The cause of his disease was unknown but was presumed to be adrenal cortical tuberculosis, since x-ray studies of the chest revealed old fibrous tuberculosis at the left apex. The adrenal areas showed no calcification. One skin test for tuberculosis was interpreted as being positive. He was regulated on 2 mg. desoxycorticosterone acetate intramuscularly and 7 gm. of additional salt.

Methods of Study: General.—The patients lived continuously in a special metabolic unit of the hospital during the entire



study. The metabolic unit is designed for the careful measurement of intake and output. The patients were up and about the unit daily except during the performance of glucose and insulin tolerance tests at which time they were confined to bed. Their activity was fairly uniform from day to day. The study period for each patient was of six days duration.

Treatment.—The patients were given intramuscular injections of desoxycorticosterone acetate in sesame oil daily; the amount given to any one patient was the same throughout the study. Subject P received 2 mg. daily, Subject U, 3 mg. daily, and Subject M, 2 mg. daily.

To these basal treatments were added, during separate periods of study, either testosterone propionate or cortisone. Subject P received testosterone propionate, 25 mg. intramuscularly daily for twenty-two days (3 six day periods plus the four days dur-

ing carbohydrate studies), a total of 550 mg. Subject U received 37.5 mg. of testosterone propionate daily for sixteen days (2 six day periods plus four days during carbohydrate studies), a total of 590 mg. Subject M received 50 mg. testosterone propionate daily for fifteen days (2 six day periods plus the three days during carbohydrate studies), a total of 750 mg.

Subject P was given daily intramuscular injections of 50 mg. cortisone for twenty-two days (3 six day periods plus four days during carbohydrate studies), a total of 1100 mg. Subject U was given intramuscular injections of 50 mg. cortisone twice daily for sixteen days (2 six day periods plus four days during carbohydrate studies), a total of 1600 mg. Subject M was not given cortisone.

Diets.—Each patient was permitted to select his diet within the limits necessary for an accurate metabolic study. Three

menus were given twice within each six-day period. In order to avoid fluctuations in the content of the diets, the meat used for each study was purchased at one time from the same animal and was immediately cut into weighed servings, wrapped and frozen; the canned vegetables and other commodities were bought in quantity for the entire study from the same stock source. Each portion of food in the diet was weighed on a torsion balance.

Studies of carbohydrate metabolism.—Determinations of the fasting blood sugar were made on the first and fourth day of each period. Carbohydrate studies which consisted of an intravenous glucose tolerance test on one day, insulin and epinephrine tolerance tests the next day, a day of rest (except in the study of Subject M), and then fasting for twenty-four hours, were done at the end of the last control period just prior to beginning the periods during which testosterone or cortisone were given. Immediately following the last period of either testosterone propionate or cortisone therapy the carbohydrate studies were repeated. They were also done at intervals following the discontinuation of the above therapy until the results coincided with those prior to therapy.

Glucose tolerance tests were performed by administering 0.5 gm. of glucose per kg. of ideal body weight in a 20 per cent solution intravenously during a period of thirty minutes. Insulin tolerance tests were performed by administering 0.05 units of insulin per kg. of ideal body weight intravenously, a solution of insulin containing 5 units per cc. being employed. The epinephrine tolerance test consisted of injecting subcutaneously 0.5 cc. of a 1:1000 solution of epinephrine immediately following the insulin tolerance test. The twenty-four hour fasting period was considered as beginning in the morning which was fourteen hours

after the last meal. Blood sugar determinations were made at six hour intervals during the twenty-four hour fasting periods.

TABLE 1

Fasting levels of blood sugar on Subject P treated with desoxycorticosterone acetate and testosterone propionate

Period	Daily Treatment	Sugar
1	DOCA	83 (77-86)
2	DOCA	79 (77-82)
3	DOCA + 25 mg. testosterone propionate	76 (72-78)
4	DOCA + 25 mg. testosterone propionate	72 (72-73)
5	DOCA + 25 mg. testosterone propionate	73 (72-75)
6	DOCA	70 (65-72)
7	DOCA	75 (72-78)
8	DOCA	73 (72-82)
9	DOCA	75 (72-82)
10	DOCA	74 (72-82)
11	DOCA	77 (72-80)

TABLE 2

Fasting levels of blood sugar of Subject U treated with desoxycorticosterone acetate and testosterone propionate

Period	Daily Treatment	Sugar
1	DOCA	75 (72-78)
2	DOCA	75 (72-78)
3	DOCA + 37.5 mg. testosterone propionate	73 (65-82)
4	DOCA + 37.5 mg. testosterone propionate	78 (75-82)
5	DOCA	81 (75-88)
6	DOCA	86 (85-88)
7	DOCA	84 (82-85)
8	DOCA	81 (74-86)

TABLE 3

Fasting levels of blood sugar of Subject M treated with desoxycorticosterone acetate and testosterone propionate

Period	Daily Treatment	Sugar
1	DOCA	82 (72-91)
2	DOCA	86 (84-91)
3	DOCA + 50 mg. testosterone propionate	80 (75-91)
4	DOCA + 50 mg. testosterone propionate	81 (75-91)
5	DOCA	86 (86-88)
6	DOCA	87 (86-88)
7	DOCA	85 (83-88)

TABLE 4

Fasting levels of blood sugar of two patients with Addison's disease treated with desoxycorticosterone acetate and cortisone
Subject U

Period	Treatment	Fasting Blood Sugar mg. per 100 cc.
1	DOCA	85.5 (80-91)
2	DOCA	85.5 (84-87)
3	DOCA	84.5 (84-85)
4	DOCA + cortisone	89.5 (85-92.5)
5	DOCA + cortisone	97.3 (91-101)
6	DOCA	89.7 (82-96)
7	DOCA	95.7 (94-97.5)
8	DOCA	84.7 (82-87.5)
9	DOCA	76 (76-80)
10	DOCA	79 (73-85)
<i>Subject P</i>		
1	DOCA	74 (72-76)
2	DOCA	74.5 (72-77)
3	DOCA + cortisone	78.3 (72-83)
4	DOCA + cortisone	84.5 (82-85)
5	DOCA + cortisone	84.3 (83.5-85)
6	DOCA	67 (65-69)
7	DOCA	74.5 (71.5-77.5)

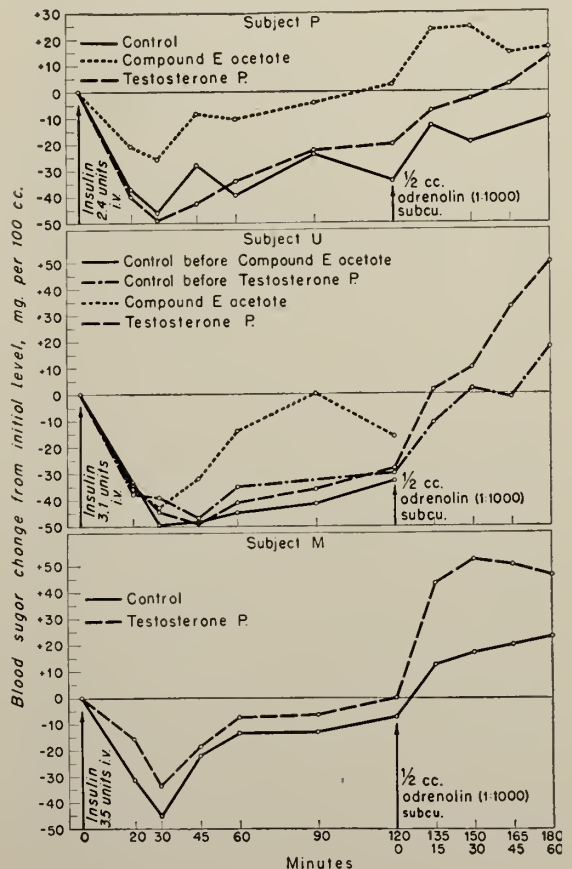
Results: Changes in the level of the fasting blood sugar during testosterone propionate therapy were of small magnitude and probably not significant. The increase in the level of the fasting blood sugar during cortisone therapy suggests a definite change (tables 1, 2, 3 and 4).

Except for an exaggerated initial rise in the blood sugar level during therapy with cortisone there was little or no alteration in the blood sugar curves during the glucose tolerance tests, as compared with the controls, when the patients were receiving either testosterone or cortisone (figs. 1, 2, and 3).

Insulin tolerance tests revealed no change in the degree of depression of the level when the patients were being treated with testosterone propionate as compared to those

when they were receiving the basal treatment of desoxycorticosterone acetate alone. When Subjects P and U were receiving cortisone, however, the insulin tolerance tests showed a smaller depression of the blood sugar level and a higher blood sugar level at the conclusion of the test (fig. 4).

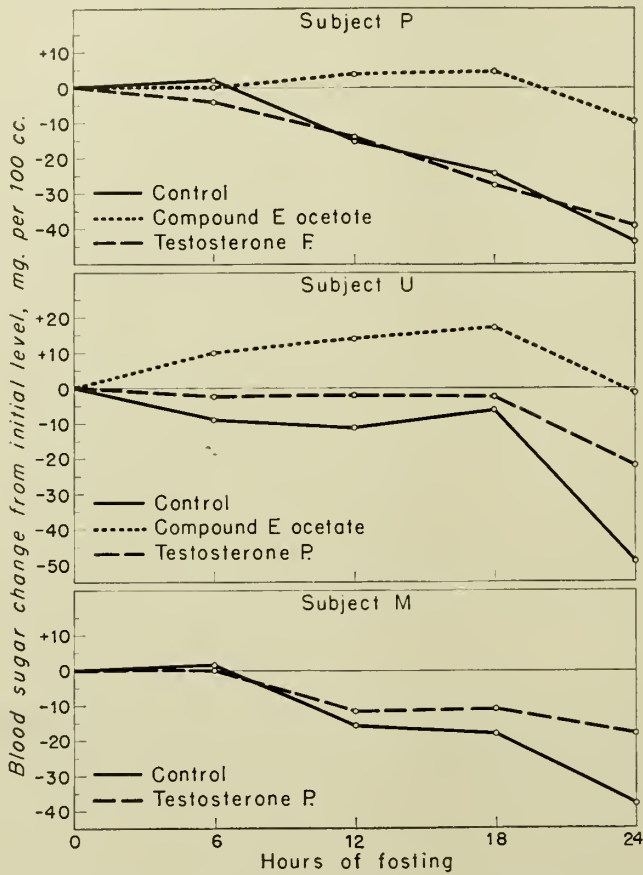
The epinephrine tolerance tests show increased rises in the level of the blood sugar when the patients were receiving either testosterone propionate or cortisone as compared to the levels obtained when they were receiving desoxycorticosterone acetate only. There was a somewhat quicker rise in the blood sugar level when Subject P was receiving cortisone as compared to that when she received testosterone propionate therapy, but there is no significant difference of the two blood sugar levels at the conclusion of the test (fig. 4).



During the course of a twenty-four hour fast there was no appreciable difference in

the behavior of the blood sugar when the patients received testosterone propionate as compared to its behavior when they received desoxycorticosterone acetate alone. However, when they received cortisone in addition to desoxycorticosterone acetate there was much less fall in the blood sugar during fasting. (fig. 5)

sulin tolerance tests, the patients remained virtually free of symptoms. Although the blood sugar levels were approximately the same in all of these tests when testosterone propionate was administered as they were when the basal treatment alone was employed, the only clinical objective finding noticed in association with hypoglycemia



During basal treatment with desoxycorticosterone acetate the subjective symptoms and clinical objective signs of hypoglycemia occurring in the course of the glucose tolerance and insulin tolerance tests and the twenty-four hour fasts were moderate to severe. On the contrary, even at comparable blood sugar levels, symptoms and signs of hypoglycemia were minimal to absent when the patients were receiving testosterone propionate or cortisone. In the case of cortisone, hypoglycemia of significant degree was not observed during fasting, and when it did occur in the course of glucose or in-

during the therapy with testosterone was slight sweating. Subject P had very severe hypoglycemic symptoms and signs during the various carbohydrate tests when she received only desoxycorticosterone acetate. Her worst symptoms and signs occurred toward the end of a twenty-four hour fast on two occasions, when she became unconscious and incontinent of urine and feces. However, when she was receiving testosterone propionate she was alert, cheerful and had no definite clinical signs of hypoglycemia during any of the above carbohydrate studies.

Discussion: In many patients with Addison's disease there is a tendency to hypoglycemia, particularly during fasting. Carbohydrate oxidation is thought to be normal or increased, but the ability to form glucose and glycogen from intermediate products of carbohydrate and protein metabolism is impaired. Under some conditions, including fasting, the glycogen depots in the body may soon be exhausted. It is not always possible to ingest enough preformed carbohydrate to maintain the blood glucose level to preserve adequate stores of glycogen in the liver and muscles at all times. Thorn and his associates¹ have shown that hormones of the adrenal cortex—desoxycorticosterone acetate, adrenal cortical extract, corticosterone, and compound E (cortisone)—in the order named—increase the ability of the body to form glucose and glycogen from the intermediate products of both carbohydrate and protein metabolism but the influence of the above substances on electrolyte metabolism decreases in the order listed above.

Long and his co-workers² showed that corticosterone and its derivatives increased the level of glucose in the blood of both normal and adrenalectomized rats and mice maintained in good health on a high daily intake of sodium chloride. In addition, the total store of carbohydrate in the body was increased when the hormones were administered. It was suggested by Long that, since there was an increase in the excretion of nitrogen, and in the absence of experimental evidence for the transformation of fat to carbohydrate, the most probable source of the additional carbohydrate seemed to be protein. In other words, the increase in the excretion of nitrogen indicated the utilization of an amount of protein which would account for the newly formed carbohydrate. Even during a fast, the conversion of protein to glucose proceeds at a rate sufficient

to sustain the concentration of glucose above the level at which symptoms of hypoglycemia appear. On the contrary, during the use of sodium chloride alone as treatment of the adrenalectomized animal the rate of utilization of endogenous protein cannot be increased to the point at which a normal blood sugar level is maintained and glycogen is deposited in the liver. Wells and Kendall³ have shown that even the stimulus to protein catabolism which is associated with phlorhization does not result in a high excretion of glucose by the adrenalectomized rat when maintained on sodium chloride alone. The administration of corticosterone and related hormones increased the glucosuria to that observed in the "normal" phlorhizinized rat. The source of the glucose in this case was apparently protein since the D:N ratio was 3.7:1.

The results of carbohydrate studies on Subjects P and U following administration of cortisone coincide with the experimental and clinical observations above (table 4). There was an increase in the fasting blood sugar levels, a failure of the blood sugar levels to drop to hypoglycemic levels during a twenty-four hour fast, no appreciable change in the glucose tolerance test, a smaller depression of the blood sugar level and a higher blood sugar level at the end of the insulin tolerance test, and, finally, an increase in liver glycogen as suggested by the results of the epinephrine tolerance test.

The experimental and clinical observations of carbohydrate metabolism in adrenal cortical insufficiency treated with testosterone are few. Following testosterone propionate therapy in normal rabbits, Lewis and McCullagh⁴ observed no modification in the glucose tolerance curves but there was an increase in liver glycogen. Reports of studies of carbohydrate metabolism in Addison's disease treated with testosterone are incomplete. However, the impression is ob-

tained that hypoglycemia is corrected when patients with Addison's disease are treated with testosterone. Talbot⁵ reported that testosterone therapy in an 8 year old girl with Addison's disease prevented a fall in the blood sugar levels during fasting, even though the patient was known to be subject to attacks of hypoglycemia prior to testosterone therapy.

The carbohydrate studies in the 3 patients, Subjects P, U and M, during testosterone propionate therapy suggested an increase in the liver glycogen as manifested by the results of the epinephrine tolerance test, no increase in the fasting blood sugar levels, no appreciable change in the blood sugar levels in the glucose tolerance tests, the insulin tolerance tests or the twenty-four hour fasts as compared with the same studies performed when the patients were on basal treatment with desoxycorticosterone acetate. Except for the glucose tolerance tests and the epinephrine tolerance tests, the blood sugar levels occurring in the carbohydrate studies during testosterone propionate therapy were significantly lower than those obtained during cortisone therapy. Although this rather marked difference existed between the blood sugar levels following the administration of cortisone and testosterone propionate one clinical observation became prominent: the patients tolerated hypoglycemia almost as well during testosterone propionate therapy as they did during therapy with cortisone. The only symptom or sign of hypoglycemia noticed during therapy with testosterone or cortisone was mild sweating. That this toleration of hypoglycemia was not fortuitous but related to the therapy with testosterone propionate or cortisone is borne out by the time relationships between treatment and a return to the pre-treatment tolerance for hypoglycemia. This increased tolerance of the patients for hy-

poglycemia and the simultaneous increased stores of liver glycogen as suggested by the results of the epinephrine tolerance test following testosterone propionate therapy might be explained by the more ready availability of protein which could serve as a precursor of glucose.

Conclusions: 1. The effects of testosterone propionate on carbohydrate metabolism as measured by means of determinations of the fasting blood sugar, glucose, and insulin tolerance tests, and the behavior of the blood sugar during prolonged fasting suggest an improvement in carbohydrate metabolism since clinically the patients tolerated so well the low hypoglycemic blood levels occurring in the above tests. The increased liver glycogen as measured by the epinephrine tolerance test points to the possible gluconeogenic action of testosterone propionate.

2. The administration of cortisone in doses of 50 to 100 mg. daily to the 2 female patients had definite effect on carbohydrate metabolism, as indicated by a diminished hypoglycemic response to insulin, an increase in liver glycogen as measured by the epinephrine tolerance test, and a better maintenance of the blood sugar level during prolonged fasting.

REFERENCES

1. Thorn, G. W.; Koepf, G. F.; Lewis, R. A., and Olsen, Elizabeth F.: Carbohydrate Metabolism in Addison's Disease, *J. Clin. Investigation* 19:813-832, 1940.
2. Long, C. N. H.; Katzin, B., and Fry, Edith: The Adrenal Cortex and Carbohydrate Metabolism, *Endocrinology* 26:309-344, 1940.
3. Wells, B. B., and Kendall, E. C.: The Influence of the Adrenal Cortex in Phlorhizin Diabetes, *Proc. Staff Meet., Mayo Clin.* 15:565-573, 1940.
4. Lewis, Lena A., and McCullagh, E. P.: Carbohydrate Metabolism of Animals Treated with Methyl Testosterone and Testosterone Propionate, *J. Clin. Endocrinol.* 2:502-506, 1942.
5. Talbot, N. B.; Butler, A. M., and MacLachlan, E. A.: The Effect of Testosterone and Allied Compounds on the Mineral, Nitrogen and Carbohydrate Metabolism of a Girl with Addison's Disease, *J. Clin. Investigation* 22:583-593, 1943.

DISCUSSION OF PAPERS BY DRs. ATWATER, HOCK, MULLINS, RICHARDSON, TURNER, STEWART, JACOBS, HILSMAN AND CLUXTON

NOTE: The papers referred to in the following discussions were published in two numbers of THE JOURNAL, namely, September and October, 1950.—Ed.

DR. McCLAREN JOHNSON (Atlanta): Mr. President, Ladies and Gentlemen: People seem to be either violently opposed to gastroscopy or violently in favor of it. I am neither, but my attitude has been conservative and still is.

Some years ago I was even prejudiced against it. Dr. Atwater's technic is so smooth that after watching him I have entirely lost that prejudice. I think gastroscopy should be used whenever it will help settle a difficult decision, but not by any means as a routine procedure.

With the help of Dr. Atwater and his gastroscope I was able to avoid resorting to surgery in a 70-year-old dentist, who now heartily approves of gastroscopy. Very recently Dr. Atwater gave me needed reassurance in a case of unexplained hematemesis. I intend to call on Dr. Atwater for help whenever I need it, and I believe I will do so with increasing frequency.

I am afraid I disagree with him a little on his attitude about gastric ulcers. Certainly some of them are benign, but I feel that we must consider each gastric ulcer malignant until we can prove beyond reasonable doubt that it is not a cancer. I call for surgical consultation as soon as I find a gastric lesion of any type. I would far rather make a tentative diagnosis of cancer, and change it later than to do the reverse. As long as we maintain that state of mind I believe we will make fewer tragic mistakes.

I should like to mention Dr. Richardson's paper next. There is a word of caution to be said about the gastric analysis in differential diagnosis of benign and malignant gastric ulcers. It is true that the finding of achlorhydria is in favor of malignancy. Unfortunately, it is not true that the presence of hydrochloric acid indicates a benign lesion. The largest gastric cancer that I have had resected successfully had a low normal hydrochloric acid reading and a normal blood count.

As Dr. Richardson has pointed out, there are some cases which have to have a simple gastroenterostomy, but I have had so many unpleasant experiences with this that I agree with him it should be reserved for those cases only.

In either gastric or duodenal ulcer I personally favor a partial gastric resection with an anastomosis of the Hofmeister type.

Dr. Hock said we must be pancreas-conscious, and I think that bears repeating. I think it also should be stressed that if serum amylase and lipase tests are done they should be done early, since subsequent serial tests may show a trend which may have some diagnostic value. Perhaps he will touch upon that in closing, if he has time.

I feel particularly interested in Dr. Mullins' paper on adenocarcinoma of the colon and rectum because so many of these patients can be saved. We should take advantage of that fact by using the sigmoidoscope and barium enema far more frequently. The tumors which the barium enema misses should be seen by the sigmoidoscope. The prognosis is good in these cases, and the reward for diligence is great.

Dr. Jacobs' paper is difficult to assimilate in one sitting. I wish we could read some of it a second or third time. I do want to make a plea, as one who does not treat allergy, for a wider recognition of allergy as a possible answer to some of our unanswered problems.

The study reported by Dr. Hilsman is extremely valuable. Too many of us have felt that bright red blood must come from the most distal parts of the colon. Actually, blood from any part of the digestive tract can be red, as Dr. Hilsman has shown. Certainly blood in any amount or of any color demands an immediate and thorough study of the entire digestive tract by every means at our command.

In many cases I have seen harrum in the rectum within three hours after the barium was swallowed. Such a patient would obviously pass red blood regardless of the level of the bleeding.

I was very much impressed by Dr. Stewart's paper on closed peritoneal drainage. As a medical man I would not be impertinent enough to comment on it except to say that I hope he is right, because it appeals to me and it seems to me to be nearer nature's way.

The Drs. Turner spoke of intussusception, which deals mostly with infants, so I shall not touch on it because most of the "infants" I see are twenty-one years of age or over.

Dr. Cluxton's paper I am afraid is beyond my scope and I will be wise and forego discussion of it.

Thank you.

DR. GRADY COKER (Canton): Members of the Medical Association of Georgia, I see no reason why gastroscopy, as presented by Dr. Atwater, should not be as valuable in diagnosis of gastric lesions as cystoscopy is in the diagnosis of bladder lesions, although there is a great difference in the points of entrance and the points of observation.

With reference to adenocarcinoma of the colon and rectum, we men doing cancer work had a lot of experience in regard to this condition. What a pity it is that the patients with lesions of the gastrointestinal tract should not be as ready to tell us their subjective symptoms as they are to tell us their objective symptoms in regard to skin lesions, cancers of the breast, glands of the neck, and such things. I think probably in regard to the treatment of cancer as a whole we have made a lot of progress in those patients who are observed from objective symptoms, but in regard to the subjective cases it is a pity that so many of them come to us with adenocarcinomas of the colon that are past the stage when we can do anything about it except to do conservative treatment.

I don't think any man doing surgery of the colon in connection with cancer can have any set rule. You must use good common horse sense and do what you think best, and keep the patient living as long as possible, and as comfortable as possible.

Offhand, I recall a case that we had five or six years ago, what we thought was an adenocarcinoma of the lower ileum and cecum. It had a resection and turned out to be regional ileitis, and the patient is living today and is doing very well.

An elderly lady came to the Cancer Clinic four years ago with an adenocarcinoma of the cecum. She was 76 years of age. We did not attempt to operate, but in the meantime we gave her fraction x-ray treatments every month or two. She is living today and is very happy, and cannot palpate the mass in the area of her cecum.

I have another man who has been living into his third year, who had an obstruction near the cecum. He refused resection. We did a side-to-side anastomosis between the ileum and ascending colon, and he is living today and doing fairly well.

We have two cases of transverse colon. On one we did a two-step Mikulicz operation. Our most successful cases are the multiple-step operations in these old people. This woman lived for eight years and died of pneumonia. We have one patient living after five years, well and happy. Another patient has been living two years with an adenocarcinoma of the ascending colon. She had a two-step Mikulicz operation, and two months ago she came in and had a complete hysterectomy. I don't know what her future will be.

We have a patient in the hospital now who came in with cancer of the sigmoid colon, who had a first-step Mikulicz following an adenocarcinoma of the breast six years ago. We have several cases of adenocarcinoma of the rectum. Unfortunately practically all

of them, when we get them, are inoperable—I don't know why. They come into the Cancer Clinic, most of them completely obstructed most of them with multiple metastases. Some of them live a few months. We have two or three of them who have been living for more than a year with enterocolostomy.

I congratulate Dr. Mullins on this paper. It is something that we as doctors should pay a little more particular attention to—the subjective symptoms of our patients who come in with a diagnosis, instead of the objective symptoms.

In regard to the choice of operation in gastric and duodenal ulcer, so ably presented by Dr. Richardson, I have experienced in these cases most of our duodenal ulcers, which we see a world of. We do just a simple closure. Later, if they get an obstruction, with a low acidity, usually we do a posterior gastrojejunostomy unless they have had a lot of hemorrhage. We have had one of those patients who had a resection and who is now living with a recurrent marginal ulcer. We had another one who had a resection; she is now dead and gone. We had two others who had resections and who have been living for over a year and doing fairly well.

I think probably here again, after you have exerted all the radical surgery you can do, the vagotomy is the last resource in relieving a lot of these patients.

In regard to intussusception, discussed by Drs. John and August Turner, our experience in those cases has been mostly in children. They have done satisfactorily. Those we got late did not do all right.

Concerning peritoneal drainage, discussed by Dr. Stewart, years ago we figured out all kinds of drainage in regard to the perforated appendix and abdominal abscesses. Before the time of sulfa drugs, penicillin and other things, we used to lose a lot of cases of ruptured appendix, as did all of you. Since the discovery of those drugs we have lost only one perforated appendix, and that case was inoperable before it came to the hospital.

We very seldom drain, and when we do drain all we use is a soft Mikulicz drain down into the peritoneal cavity. Most of our cases now are closed primarily.

Sometimes, in perforated gastric ulcers, we stick the Mikulicz drain up under the diaphragm. I don't know why but it is one of those curious things that surgeons develop a habit of doing every now and then. I would say it is a surgeon's idiosyncrasy. That is the best way I can explain it.

I don't think we have to worry so much about peritoneal drainage of the abdominal cavity, with all the new drugs we have discovered in the last few years.

In regard to the studies on gastrointestinal allergy, by Dr. Jacobs, feces following the instillation of citrated blood at various levels, by Dr. Hilsman, and testosterone propionate and cortisone, by Dr. Cluxton, these papers were ably presented. I enjoyed hearing them. I have had no experience with them. I congratulate the essayists on their papers, and I shall not attempt to discuss them. Thank you.

DR. MAX MASS (Macon): Mr. Chairman and gentlemen: It has been an instructive and gratifying experience to work with Dr. Richardson in the roentgenologic evaluation of his cases of peptic ulcer.

I must admit that I approached the problem with a great deal of misgiving because of the unfavorable reports by radiologists and gastroenterologists early in 1945. I have learned since that much of the unfavorable side effects, such as high-grade retention, persistent ulcer pain, diarrhea, flatulence and inability to gain weight, were largely the result of either improper selection of cases, the employment of vagotomy alone in patients with duodenal ulcers and high acid values, or a failure to appreciate the physiological mechanism.

With the performance of complete vagotomy, com-

bined with gastroenterostomy, and improvement of surgical technic, I believe I am beginning to see for the first time a clearly defined improvement of post-operative results.

First of all, I have experienced the relief of awaiting with apprehension the immediate postoperative development, such as persistent pain, delayed emptying with clinical signs of obstruction, generally followed by a long period of convalescence, with frequent radiographic follow-up studies.

It has been my experience that, once complete vagotomy has been done in conjunction with gastroenterostomy, a single radiographic study, after a relatively short hospital stay, is all that is necessary. I seldom see the patients after this single study.

The radiologist is sometimes impressed with startling and often paradoxical roentgen findings. The patient may say he feels fine, eats everything, has no distress, sleeps well, has gained weight; and yet, as in Case No. 2 presented by Dr. Richardson, after six hours a 75 per cent gastric retention is noted. After 24 hours it was estimated a 50 per cent retention was still present, and a small amount of harium was still present in the stomach after 48 hours. Uniformly the ulcer pain has dramatically disappeared.

This was evident particularly in Cases Nos. 3 and 4. In one instance the pain persisted because of incomplete vagotomy, and was almost completely abolished when all the fibers were sectioned, whereas in the other case, which had a long, grievous history of intractable pain as a result of a marginal ulcer, the patient is now almost completely relieved and the ulcer healed.

I would like to emphasize one point in particular, mentioned by Dr. Richardson: When gastroenterostomy is combined with vagotomy in duodenal ulcer, some of the persistent mild symptoms for some months after operation may be explained on the basis of the un-resected peptic ulcer which is slowly undergoing healing.

I wish to congratulate Dr. Richardson on his devoted application to this problem. It is my feeling that we have entered upon a new era in the surgical management of duodenal peptic ulceration. Thank you.

DR. THOMAS HARROLD (Macon): Gentlemen of the Association, I would like to emphasize two points.

First, in discussing the paper on carcinoma of the rectum and sigmoid, I would like to bring out that in my experience this is the most hopeful of all the major carcinomas. We get far better results in carcinoma of the rectum and sigmoid than in carcinoma of the stomach. We get much better results than we do in carcinoma of the cervix, and perhaps comparable results in carcinoma of the fundus of the uterus. We get better results with carcinoma of the rectum and sigmoid than we do with carcinoma of the breast.

I should like to emphasize also that many of these cases, which at first seem inoperable, actually are operable, and you will get surprising results in some of the bad cases, because not all of the induration that you feel at operation is malignant disease. There is always a lot of inflammatory reaction around it. On several occasions I have gone ahead and resected what seemed to be a very bad growth, with hope of only a palliative result, only to have the patient do surprisingly well and live for a number of years.

I think the reason for the good results in carcinoma of the rectum and sigmoid is because of the location of these growths. That is one place where you can really get outside of a growth and scoop out the pelvis and do a good job. There are few other places in the body that permit as complete a radical operation as we can do in this region.

Therefore, I for one deplore the present tendency to be so-called conservative in operating on these

lesions and attempting to do less than a complete abdominoperineal resection. After all, even in the hands of those who recommend them, only around 15 per cent of the cases of carcinoma of the rectum and sigmoid are in the debatable group where there is a question of attempting to do a low resection and restore the continuity of the canal.

I believe that every time you try to restore the continuity of the canal you decrease the radical nature of the operation and you are inviting recurrences.

Also, the operative mortality in almost all reported series is higher in the cases in which an attempt is made to restore the continuity of the canal. Colostomy is not a bad thing if it is properly handled.

One point that I would like to make in regard to Dr. Stewart's paper, on drainage of the abdomen, is to emphasize the point he brought out, that most of the deaths and severe complications following peritonitis are due either to a mechanical obstruction or, more often, to a paralytic ileus. In my experience most of the cases of paralytic ileus are either caused or aggravated by a severe infection of the abdominal wall, which is often overlooked.

I have seen many patients flatten out and improve miraculously after removing the sutures in the skin and permitting drainage of hidden or suspected pus in the abdominal wall.

I would like to emphasize the value of placing a drain down to the peritoneum to avoid the infection of the abdominal wall that comes in these contaminated cases. That is where you get your toxemia, and frequently, at least, a contributing factor to the paralytic ileus so commonly accompanying these cases.

I have enjoyed this surgical symposium very much this afternoon. Thank you.

DR. M. FERNAN-NUNEZ (Dublin): In my experience over many years as a pathologist I have been constantly amazed by finding, at the autopsy table, a cancer of the colon that was not even suspected in life. These cases usually have been treated as gastric conditions, because their symptomatology may closely simulate that of almost any variety of gastric condition.

As Dr. Hilsman showed so clearly, they may even have tarry stools, even though they are low down in the colon. They may have achlorhydria; they may have epigastric pain; they may have all the classical symptoms of a peptic ulcer or a gastric cancer.

After having tried to work them out, usually the surgeon or the internist has labeled them as a psychogenic gastrointestinal reaction, and called them neurotics, sometimes even "nuts".

Any case of apparent gastric disorder that you cannot pin a label to with pretty great clarity should be given a very careful colonic study. If you will do this you will pick up in the early stages many cases of colonic cancer that might be amenable to surgery, as was pointed out by Dr. Harrold.

WHY BREAKFAST IS IMPORTANT

Good food is essential to health, but it is astonishing how many persons omit certain foods or even skip meals to reduce expenses.

Considering health from the standpoint of dollars and cents is not economy, a *Health Talk* issued by the Educational Committee of the Illinois State Medical Society points out.

The body needs fuel, just as a furnace or an automobile or any other source of power. In the machinery of the body, food fuel is converted and distributed among the organs to maintain a normal state of health.

Breakfast is therefore important. Why? Because ordinarily at this meal the body has been without food for eight or ten hours, the longest interval between meals.

An adequate breakfast restores the energy level needed to carry out the day's work with efficiency. It prevents midmorning fatigue and maintains a high level of productivity during the morning hours.

In children, breakfast should supply every element necessary for good nutrition as well as provide for growth and energy. Ripe or cooked fruit or fruit juice; hot or cold cereal with milk; toast, bread or rolls with margarine or butter; and a substantial dish such as bacon and eggs, plus a glass or two of milk, should be included.

For the adult whose daily activities do not call for great energy, fruit, toast or rolls, and a beverage will frequently suffice, particularly if the noon meal is balanced.

Persons engaged in physical labor, however, require a heavier meal, including eggs or meat or some other hot dish, such as potatoes. This is in addition to fruit, cereal, bread and beverage.

With the high cost of living steadily going higher, and suggestions for economy of food persistently being recommended, it is well to remember that a good functioning healthy body is the one unit that can achieve and maintain that economy. The farmer must have a healthy body to manage his farm. It is he who provides food for the world. The executive in the office must have a healthy body to direct the many activities that keep the machinery of world affairs moving. The clerical or office workers must have a healthy body to keep this machinery intact. And the child must have a healthy body to form the pattern of the world of tomorrow.

Breakfast is a well chosen word. Breaking the fast after hours of sleep is important. During sleep the body is at rest physically, but some energy is still being consumed. And new energy must be provided for the day's work ahead. This cannot be done on one or two meals. It is the distributed daily intake of food that keeps the body balanced.

A body poorly nourished is like an automobile without gasoline. Unless your doctor orders it, don't cut down on your food. Let a physical examination determine the state of your health—then eat your meals accordingly.

AUREOMYCIN SHOWS PROMISE AS TREATMENT FOR MUMPS

Results obtained in treating three patients with mumps suggest that aureomycin, an antibiotic drug, may be of definite value in this disease, according to two doctors from Sayre, Pennsylvania.

Two women treated for mumps with aureomycin showed definite improvement within 24 hours after receiving the first dose of aureomycin. Drs. Wilfred D. Langley and John Bryfogle say in the August 12 *Journal of the American Medical Association*. Aureomycin was given to both women on the second day after swelling in the glands began.

Another patient, a man, received the drug less than 24 hours after symptoms of mumps were first noticed. Forty-eight hours after treatment was begun, he showed definite improvement.

"While no definite conclusions can be drawn from treating three patients in the manner described, the results obtained would suggest that aureomycin may be of definite value in this disease," the doctors point out.

THE JOURNAL

OF THE
MEDICAL ASSOCIATION OF GEORGIA

EDGAR D. SHANKS, M.D., Editor
478 Peachtree Street, N. E., Atlanta, Ga.

OCTOBER, 1950

DOCTOR DRAFT LAW

(PUBLIC LAW 779—81ST CONGRESS)

(CHAPTER 939—2D SESSION)

(S. 4029)

AN ACT

To amend the Selective Service Act of 1948, as amended, so as to provide for special registration, classification, and induction of certain medical, dental, and allied specialist categories, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled. That section 4 of the Selective Service Act of 1948, as amended, is hereby amended by adding at the end thereof the following subsections:

“(i) (1) Notwithstanding any other provision of this title, except subsections 6 (j) and 6 (o), the President is authorized to require special registration of and, on the basis of requisitions submitted by the Department of Defense and approved by him, to make special calls for male persons qualified in needed—

“(A) medical and allied specialist categories who have not yet reached the age of fifty at the time of registration. and

“(B) dental and allied specialist categories who have not yet reached the age of fifty at the time of registration.

Persons called hereunder shall be liable for induction for not to exceed twenty-one months of service in the Armed Forces. No such person who is a member of a reserve component of the Armed Forces shall, so long as he remains a member thereof, be liable for registration or induction under this subsection, but nothing in this subsection shall be construed to affect the authority of the President under any other provision of law to call to active duty members and units of the reserve components. No person in the medical, dental, and allied specialist categories shall be inducted under the provisions of this subsection after he has attained the fifty-first anniversary of the date of his birth.

“(2) In registering and inducting persons pursuant to paragraph (1) of this subsection, the President shall, to the extent that he considers practicable and desirable, register and induct in the following order of priority:

“First. Those persons who participated as students in the Army specialized training pro-

gram or similar programs administered by the Navy, and those persons who were deferred from service during World War II for the purpose of pursuing a course of instruction leading to education in one of the categories referred to in clauses (A) and (B) of paragraph (1) of this subsection, who have had less than ninety days of active duty in the Army, the Air Force, the Navy, the Marine Corps, the Coast Guard, or the Public Health Service subsequent to the completion of or release from the program or course of instruction (exclusive of the time spent in postgraduate training).

“Second. Those persons who participated as students in the Army specialized training program or similar programs administered by the Navy, and those persons who were deferred from service during World War II for the purpose of pursuing a course of instruction leading to education in one of the above categories, who have had ninety days or more but less than twenty-one months of active duty in the Army, the Air Force, the Navy, the Marine Corps, the Coast Guard, or the Public Health Service subsequent to the completion of or release from the program or course of instruction (exclusive of the time spent in postgraduate training).

“Third. Those who did not have active service in the Army, the Air Force, the Navy, the Marine Corps, the Coast Guard, or the Public Health Service subsequent to September 16, 1940.

“Fourth. Those not included in the first and second priority who have had active service in the Army, the Air Force, the Navy, the Marine Corps, the Coast Guard, or the Public Health Service subsequent to September 16, 1940. Inductions of persons in this priority shall be made in accordance with regulations prescribed by the President which may provide for the classification of such persons into groups according to the number of full months of such service which they have had and for the induction of the members of any such group after the induction of the members of any other such group having a lesser number of full months of such service.

In the selection of individuals from among the categories established by subsection (i) for induction, the President is authorized, under such rules and regulations as he may prescribe, to provide for the deferment of any individual whose deferment is found to be equitable and in the national interest, taking into consideration the length of his previous service in the Armed Forces (including the Coast Guard and the Public Health Service) of the United States, the extent of his participation in the Army specialized training program or similar program administered by the Navy, reasons of hardship or dependency, and the maintenance of the national health, safety, or interest.

"(3) It is the sense of the Congress that the President shall provide for the annual deferment from training and service under this title of numbers of optometry students and pre-medical, preosteopathic, preveterinary, pre-optometry and predental students at least equal to the numbers of male optometry, premedical, preosteopathic, preveterinary, preoptometry and predental students in attendance at colleges and universities in the United States at the present levels, as determined by the Director.

"(j) The President shall establish a National Advisory Committee which shall advise the Selective Service System and shall coordinate the work of such State and local volunteer advisory committees as may be established to cooperate with the National Advisory Committee, with respect to the selection of needed medical and dental and allied specialist categories of persons as referred to in subsection (i). The members of the National Advisory Committee shall be selected from among individuals who are outstanding in medicine, dentistry, and the sciences allied thereto, but except for the professions of medicine and dentistry, it shall not be mandatory that all such fields of endeavor be represented on the committee.

In the performance of their functions, the National Advisory Committee and the State and local volunteer advisory committees shall give appropriate consideration to the respective needs of the Armed Forces and of the civilian population for the services of medical, dental, and allied specialist personnel; and, in determining the medical, dental, and allied specialist personnel available to serve the needs of any community, such committees shall give appropriate consideration to the availability in such community of medical, dental, and allied specialist personnel who have attained the fifty-first anniversary of their birth.

SEC. 2. Notwithstanding the provision of section 203 of Public Law 351, Eighty-first Congress, commissioned officers of the reserve components called or ordered to active duty with or without their consent, shall, if otherwise qualified, be entitled to the benefits of section 203 of Public Law 351, Eighty-first Congress.

SEC. 3. Section 202 of the National Security Act of 1947, as amended, is hereby amended by adding at the end thereof the following subsections:

"(g) Under such regulations as he shall prescribe, the Secretary of Defense with the approval of the President is authorized to transfer between the armed services, within the authorized commissioned strength of the respective services, officers holding commissions in the medical services or corps including the reserve components thereof. No officer shall be so transferred without (1) his consent, (2) the consent of the service from which the transfer is to be

made, and (3) the consent of the service to which the transfer is to be made.

"(h) Officers transferred hereunder shall be appointed by the President alone to such commissioned grade, permanent and temporary, in the armed service to which transferred and be given such place on the applicable promotion list of such service as he shall determine. Federal service previously rendered by any such officer shall be credited for promotion, seniority, and retirement purposes as if served in the armed service to which transferred according to the provisions of law governing promotion, seniority, and retirement therein. No officer upon a transfer to any service from which previously transferred shall be given a higher grade, or place on the applicable promotion list, than that which he could have attained had he remained continuously in the service to which retransferred.

"(i) Any officer transferred hereunder shall be credited with the unused leave to which he was entitled at the time of transfer."

SEC. 4. Notwithstanding any other provision of law, where any person who served on active duty as a physician or dentist in Armed Forces (including the Public Health Service) of the United States subsequent to September 16, 1940, thereafter has been, or shall be, recalled to active duty as a physician or dentist in the Armed Forces (including the Public Health Service) of the United States, such person may, under regulations prescribed by the President, be promoted to such grade or rank as may be commensurate with his medical or dental education, experience, and ability.

SEC. 5. No person inducted under the provisions of this Act shall be entitled to the benefits of the provisions of section 203 of Public Law 351, Eighty-first Congress.

SEC. 6. For the purposes of this Act, the term "allied specialist categories" shall include, but not be limited to, veterinarians, optometrists, pharmacists, and osteopaths.

SEC. 7. This Act, except for section 2 and section 5, shall terminate on July 9, 1951.

Approved September 9, 1950.

A.M.A. CLINICAL SESSION

The Fourth Clinical Session of the American Medical Association, designed primarily for the general practitioner, will be held in Cleveland, December 5-8.

The scientific sessions and the scientific and technical exhibits will be presented in the Cleveland Municipal Auditorium. Meetings of the House of Delegates will be held in the Statler Hotel. These sessions of the body elected to govern the affairs of the A.M.A. are attracting more and more non-delegate physicians each year.

Outstanding clinical teachers with recognized ability as speakers will headline the scientific demonstrations. Actual cases will be presented

and discussed. Diagnoses, treatment and preventive measures as they fit into daily practice will receive the greatest attention.

Each clinical session will be limited to an attendance of 100 physicians. These small groups will make it possible for the general practitioner to enter actively into the discussion and to inquire about his own cases. Leading men in each of the fields under discussion will be available to help with the problems presented.

In obstetrics, difficult cases of interest will be featured. Especially stressed will be the general subjects of breach deliveries, induction of labor, indications for cesarean section, obstetric analgesia and anesthesia, and hemorrhages.

Clinical discussions featuring actual pediatric patients have been programmed. The care of premature infants, acute diarrhea in children, rheumatic fever, preventive medical measures and psychiatric care for small children are among the interesting topics scheduled.

Because of the unusual interest displayed last year in the section devoted to management of heart cases, there will be a similar session this year. It will include discussions on hypertension, recent advances in drug therapy, including ACTH as it applies to heart disease, acute arterial occlusion and cardiac arrhythmias.

Of special interest will be discussions on Parkinsonism, the use of the electro-encephalograph, electric shock therapy and psychotherapy.

With more cases of fluid balance appearing because of the larger number of geriatric patients, there will be discussions on fluid replacement in shock, renal repairment, dehydration and other topics.

Of unusual interest will be the new studies and clinical histories involving traumatic surgery. This will include material on reconstructive surgery, emergency analgesia and emergency surgical measures.

Taken up in detail will be the management of post operative or inoperable cancer patients. The use of analgesics and the effects of hormone and radiological treatment will be discussed.

An excellent program has been arranged covering diabetes. This will include diagnosis, vascular complications, special consideration in pregnancy and surgery, and dietary problems.

Very timely will be the panel discussions and demonstrations on the diagnosis of poliomyelitis, the treatment of respiratory failure and the management of paralytic cases. There will be demonstrations of physical therapy and rehabilitation measures for poliomyelitis cases.

Papers covering practical problems in dermatology and syphilology will be presented. Deep fungous infections and industrial, allergic and contact dermatoses will be demonstrated and discussed. Emphasis will be put on the newest developments in syphilology.

New developments and refinements of older

techniques will feature the discussions on anesthesiology. Spinal anesthesia, management of the surgical case, intravenous administration and other practical problems will be reviewed.

Outstanding speakers will discuss ulcers, jaundice, infectious hepatitis, cirrhosis and other gastro-intestinal diseases. Newest advances in medicine and the use of many newer drugs and their application to the general practice of medicine will be presented in another section. Of special interest will be the discussions on the use of antibiotics, hormones and antispasmodics.

Outstanding features of the scientific exhibits will be special demonstrations on fractures, diabetes, rheumatism and arthritis. Exhibits will be presented on cancer, pediatrics, chest diseases, surgical procedures and other subjects correlated with the clinical presentations.

Once again color television will take its place on the program. A schedule of surgery, clinical treatment and examination will be telecast from the Western Reserve School of Medicine to the auditorium. It will be sponsored by Smith, Kline & French Laboratories.

The annual General Practitioner Award has come to be regarded as one of medicine's highest honors and a definite step toward increasing the recognition of the family doctor. This year's selection will be made at the Cleveland meeting.

The steadily climbing registration of general practitioners at the clinical sessions and the comments of those participating indicate these meetings are valuable means of keeping abreast of developments in medicine. It is hoped that a record number of physicians will take advantage of the opportunity in December to attend. The program has been designed with that in mind.

ADVISE EXTREME CAUTION IN USE OF NEWER INSECTICIDES

Extreme caution in using newer insecticides containing the chemicals HETP, TEPP and parathion was advised today by a group of private and governmental physicians and research men who are members of or consultants to the American Medical Association's Committee on Pesticides.

These insecticides are used principally for controlling aphids, mites and other fruit and vegetable crop insects. They are not used for controlling insects attacking man or animals or for insects in households and storage rooms.

Recommendations concerning the preparations were made in a report which appears in the September 9 *Journal of the American Medical Association*.

Several deaths and moderate to severe poisonings have resulted from exposure to the chemicals in their production or use, Dr. Herbert

K. Abrams of the California Department of Health, Berkeley, and Drs. Donald O. Hamblin and John F. Marchand, medical director and assistant medical director of the American Cyanamid Company, New York, said.

Authenticated cases of poisoning reported total 198 to date, a comparatively large number of persons in relation to the short period in which the chemicals have been in use, the doctors added. This number is not believed to include all the accidents that have occurred.

Insecticides containing HETP, TEPP and parathion are sold under a large number of trade names, according to S. A. Rohwer, D.Sc., and H. L. Haller, Ph.D., assistant to the chief and assistant chief of the Bureau of Entomology and Plant Quarantine, U. S. Department of Agriculture, Washington, D. C.

HETP, TEPP and parathion may be absorbed through the skin, respiratory tract, eyes or gastrointestinal tract, Dr. David Grob of Johns Hopkins University and Hospital, Baltimore, said.

Although TEPP is the most potent of the three chemicals, the greater over-all danger to man and domestic animals is from parathion because of its greater stability in water and greater solubility in fatty mediums, including the outer layer of fruit and leaves, Dr. Grob pointed out.

He listed these safety measures to reduce exposure and minimize absorption of the insecticides:

1. Clean protective clothing is required. The type depends on the nature of the product and degree of exposure.

2. Workmen engaged in manufacture or packaging of the chemicals should be protected by adequate exhaust ventilation. Personnel applying aerosols of the chemicals, including pilots, should wear face masks. Wind dispersal should be avoided to unprotected personnel or domestic animals.

3. Personnel should remove protective clothing and wash hands, arms and face thoroughly with soap and water before eating, drinking or smoking. Insecticides containing parathion may persist for varying periods as residues on plant tissue. Precautions in reference to harvest and the like should be observed for safety of all concerned.

4. Inflammable insecticide containers should be burned and any area in which the insecticides are spilled should be decontaminated by cleaning and washing. Waste should be burned or buried.

5. A periodic blood test helps to prevent cumulative effects in exposed personnel by indicating those who should be removed from exposure.

Toxic effects of the three chemicals are similar and are referable to the nervous system, Dr. Grob said. The first symptoms to appear usually are loss of appetite and nausea, which are soon

followed by vomiting, abdominal cramps and excessive sweating, he added.

Kenneth DuBois, Ph.D., of the Toxicity Laboratory and Department of Pharmacology of the University of Chicago said that animal experimentation has shown that repeated exposure to parathion may result in subacute poisoning, but no evidence of cumulative toxic effect has been observed with HETP or TEPP. Parathion is highly toxic to all species of animals, he concluded.

Dr. A. J. Lehman, chief of the Division of Pharmacology, Food and Drug Administration, Washington, D. C., Albert Hartzell, Ph.D., head entomologist of the Boyce Thompson Institute for Plant Research, Yonkers, N. Y., and J. C. Ward, M.Sc., chief of the Pharmacology & Rodenticide Section, Insecticide Division, U. S. Department of Agriculture, Washington, D. C., advised that it is "quite unlikely that a parathion spray residue problem will become serious if spray schedules recommended by qualified entomologists are followed."

"The extreme toxicity of (these) insecticides suggests that they can be harmful to beneficial forms of life, including certain insects, fish and wild life," they continued. "Their use on livestock and pets is not recommended. With the exception of direct application to domestic animals, little hazard exists with HETP and TEPP."

"Parathion presents a greater hazard. In the case of apples and pears, for example, if parathion is applied strictly in accordance with the recommendations of the U. S. Department of Agriculture, normal weathering should result in residues no greater than a fraction of a part per million. Traces of this magnitude would not constitute a health problem. This is not necessarily true in the case of citrus fruit. The evaluation of the health hazard from residues such as this is being made at a (Food and Drug Administration) hearing now in progress (in Washington, D. C.)."

A.M.A. MEETS IN CLEVELAND DECEMBER 5-8

What does a good family doctor do when he takes a holiday?

He heads for a medical meeting, of course, and goes right on talking about cardiac arrhythmias and gastrointestinal upsets and all the rest of the diseases that are plaguing mankind.

Better start now, Doctor, plotting a scheme for a colleague to take your OB calls for a week so that you can get out of the office for a holiday and that "clinical refresher" awaiting you at the A.M.A. Cleveland Session for General Practitioners, December 5-8.

Cleveland won't offer the abalone steaks and cable cars of San Francisco or the boardwalk and beach of Atlantic City—but it will offer you, besides the four days of demonstrations and lectures, ample opportunity to take care of the inner man at fine restaurants with eve-

nings of relaxing entertainment at its most modern theatres.

Clinical sessions will be under outstanding teachers with attendance at these meetings limited so that you can enter into the discussions and inquire about your own problems. Doctors will hear leading medical authorities discuss treatment of actual cases of cancer.

The scientific exhibit will offer special demonstrations on fractures, diabetes, rheumatism and arthritis. Technical exhibits will feature the latest developments in drugs, equipment, books and allied medical products.

Meetings of the House of Delegates will be open to all members of the medical profession, and visitors in related fields are welcome to attend the sessions which will be held Tuesday and Wednesday, December 5 and 6.

Color telecasts of surgery, clinical treatment and examination at University Hospital in Cleveland are earmarked as one of the highlights of the meeting.

Another outstanding event will be the election of America's typical family doctor to receive one of medicine's highest honors—the General Practitioner's Award. Doctors in line for this recognition are nominated annually by local and state medical societies and elected by the House of Delegates. The award goes to the doctor who best exemplifies the profession's standards of service to patients, community and country.

Last year's Clinical Session in Washington, D. C., drew over 4,000 doctors from every part of the United States. This year, the A.M.A. has issued a blanket invitation to all members of the Canadian Medical Association, which should increase normal attendance.

WHAT IS THE HEALTH FUTURE OF YOUR CHILD?

Good planning is important in developing health in your child, the Educational Committee of the Illinois State Medical Society advises in a *Health Talk*.

"A little child shall lead them" is particularly true and applicable today in health matters, because good health information is a regular part of every school curriculum.

Even in kindergarten and nursery schools good health habits are emphasized, so that the child returns home with pointed information on cleanliness, nutrition, correct posture and other simple health facts. Thus from the school into the home go simple illustrations of good health habits.

With the child as the source of information, a wise parent will put the instruction into effect. The teacher's efforts will be wasted if the parent refuses to supervise the child's resultant activities in the home.

The teacher or school nurse will notice, for example, that the child's vision is poor, a physical weakness, correction of which, sometimes with glasses, may bring an apparently slow child up to par.

Identification and correction of defects form another key to good physical and mental health. Wise indeed is the parent who has each child physically examined, from top to toe, every year from babyhood on and, when defects are located, adopts the advice of the family doctor.

The prevention of disease is important and can be accomplished, to a great extent, through immunization against diphtheria, whooping cough, smallpox, measles, tetanus and typhoid. Most of these diseases are contagious and can spread rapidly into epidemics.

In health matters, a parent cannot live just for today. Bad health habits are more difficult to correct when the child grows older. Because the child's mind is especially susceptible to impressions, good training should be the early responsibility of the parent.

The environment of the home, particularly a happy home where the father and mother are emotionally stable, with good health habits, is a significant factor in the emotional development of the child. Meals, for example, need not be elaborate, but simple and nutritious. The daily bath, which should be carried out by the growing child, is a good health habit and should become routine to the child.

Attention to the nails, the brushing of teeth, good table manners are all social "musts" for later life.

So, to repeat, planning is essential for the child's good health, mental and physical. Why not plan to make your child's birthday an annual health event? A physical examination by the family doctor on that day is a good health habit. Planning your child's health, when he is dependent on you, will pay dividends, not only to the child, but to the health of the nation.

May 1 is Child Health Day throughout the nation. Let it be the occasion to check your answer to the thought—what is the health future of your child?

ARMY AUTHORIZES APPOINTMENT OF WOMEN DOCTORS AS RESERVE CORPS OFFICERS

Appointment and concurrent assignment to active duty as Reserve Officers of women physicians, dentists, and allied specialists, has been authorized, it was announced recently by the Department of the Army.

This marks the first time authorization has been given for women to be commissioned in the Medical, Dental, Veterinary, and Medical Service Corps Reserves. They will be brought on duty under regulations currently providing for the commissioning of male officers in these Corps. Some women did serve in the Army as physicians and technicians during World War II, but their commissions have expired.

As Reserve officers on active duty, these women will be given opportunities for clinical practice and advancement which are now available to male officers in comparable grades, Major General R. W. Bliss, Surgeon General of the Army, pointed out. Appointments will be in grades from first lieutenant to colonel, depending upon age, experience, and professional qualifications. The pay, allowances, dependency and retirement benefits which accrue to male officers will apply to the women medical reservists. Women physicians and dentists will also draw the \$100 a month professional pay allowed above the base pay of their commissioned rank. They will be eligible for service in every type of military medical facility, with the exception of forward medical installations in combat zones.

General Bliss said his office had received numerous letters during the past year from women physicians desiring military service.

LINKS HIGH BLOOD PRESSURE TO AMERICAN WAY OF LIFE

Is high blood pressure produced by the mass-production economy and "cash culture" of western civilization?

A doctor from the Hypertension Clinic of the Massachusetts General Hospital, Boston, believes it may be, in some cases.

Dr. Robert Sterling Palmer reports his study of 50 patients with high blood pressure in an article in the September 23 *Journal of the American Medical Association*.

"The feature of this study of 50 personalities is

similarity rather than diversity and uniformity rather than individuality," he says. "A practical, adaptable and rather conciliatory attitude to life was common. They tended to be independent, resolute, industrious and efficient. They could fit in well with their group and were popular in their circle of friends or fellow workers.

"Outstanding talent or interest in music, art or literature, or unusual scholarship was not found, nor were there special skills, originality or even special interests other than in the occupation affording livelihood apparent in any of them. In their aptitude for their particular occupation, however, the majority seemed to be somewhat above average.

"The predominant character traits which the physician sees and which the patient recognizes in himself are those with survival value in our competitive cash culture. This is the personality's protective coloring induced by the prevailing normal climate. This personality pattern is not specific for hypertension but is characteristic of our times.

"Tension results when this outer coat does not fit the patient's inner disposition. This is the strain of integration or adaptation. This cultural factor in the causation of disease presents a problem, doubtless insurmountable in one or in several generations. This is not a reason for failure to state the problem or to attempt to do something about it.

"It is suggested that personality traits found are not specific for hypertension but rather are characteristic of our time, and that hypertension, in some cases, may be symptomatic of the suppression of the patient by the demands of our culture."

POSTWAR DISTRIBUTION OF DOCTORS MORE EVEN THAN PREWAR

Family doctors in private practice, who provide the bulk of medical care for the nation, were more evenly distributed in 1949 in relation to state population than in 1938.

This is shown by a study recently published as Bulletin 78 of the American Medical Association's Bureau of Medical Economic Research.

"Despite the tremendous population shifts during the 1940's and the high level of national prosperity, which would tend to draw physicians to the heavily populated industrial states, general practitioners have redistributed themselves into a more even pattern than was found before World War II," said Frank G. Dickinson, Ph.D., of Chicago, director of the bureau.

"The figure in our study on physician-population relationships by states that is important to most people is the distribution of family doctors who actually have their offices open for private practice. It is not the distribution of the total number of doctors. Therefore, in our computation we eliminated doctors in the government services and armed forces, on hospital duty on a full-time basis, retired physicians and those in administrative and other such positions which take them out of private practice.

"A separate study was made to show the distribution of full-time specialists—those who do no general practice—in private practice because these physicians draw their patients from wider areas and, on the whole, are located in the cities.

"However, we found that full-time specialists, like family doctors, were more evenly distributed in relation to state populations in 1949 than in 1938.

"These conclusions are based upon statistical measures of relative variations in the state physician-population ratios.

"A" AVERAGE NOT REQUIRED FOR ADMISSION TO MEDICAL SCHOOLS

An A average in premedical college work is not required for admission to medical schools, Dr. Donald G. Anderson of Chicago, secretary of the American

Medical Association's Council on Medical Education and Hospitals, said today.

According to a recent report to the council, 10 per cent of students admitted to medical schools in the United States during the academic year 1949-1950 had no better than a C+ scholastic average in premedical college work. Many others, Dr. Anderson pointed out, had B averages.

RADIOLOGIC SOCIETY TO MEET

Announcement is made by Dr. Warren W. Furey, M.D., of Chicago, president of the Radiological Society of North America, that the 36th annual meeting of the society will be held in Chicago, December 10 through the 15th.

Headquarters for the meeting will be the Palmer House in which all scientific and technical sessions will be held. Scientific exhibits are also to be displayed in the hotel.

More than 60 papers as well as refresher courses feature the convention program, according to Dr. Furey.

Dr. Wendel G. Scott of St. Louis, Missouri, will present the annual Carmen Lecture. All members of the medical profession are welcome and invited, says Dr. Furey.

DAILY OFFICE WORK MAY CAUSE NECK RIGIDITY AND HEADACHE

Office work literally gives a pain in the neck to some typists and bookkeepers, according to a Chicago eye, ear, nose and throat specialist.

"Numerous headaches are due to prolonged contraction of the neck muscles," says Dr. Noah D. Fabricant in the June issue of *Today's Health*, published by the American Medical Association.

"Some people's daily work causes an accumulation of pain-producing substances in the muscles of the neck and back," Dr. Fabricant continues.

"A person forced to hold his head rigidly in a particular position may get a headache. Bookkeepers, typists, proofreaders and dressmakers are especially susceptible to this type. They often find comfort in sitting with the head forward, chin in hands.

"Treatment for rigid, hypertonic neck muscles consists mainly of heat and massage. Heat can be applied at home in the form of an electric pad, a hot-water bottle or hot towels, or from an electric bulb with a reflector or an infra-red lamp. Obviously, one must be careful not to burn the skin.

"Physical therapy in all forms must be applied skilfully; otherwise it can do more harm than good."

CARE OF THE FEET

Improperly fitting shoes are the most common cause of painful feet, yet many people, women in particular, pay more attention to style than to comfort in the selection of shoes, the Educational Committee of the Illinois State Medical Society points out in a *Health Talk*.

Shoes should be fitted to give the wearer stability and balance in walking. Certainly the body structure is not in proportion with extremely high and narrow heels, which are present day dictates of fashion.

Since arches do not usually "fall" or "break" of themselves, it is reasonable to assume that external irritation is responsible, and usually the shoes and stockings are the culprits. On the other hand, arthritis frequently causes painful feet, especially in older persons. Disturbances of the circulation may be responsible for foot pains and nerve inflammations.

The condition "fallen arches" seems to occur most often in women and results from some injury to one of the main bones of the foot known as the astragalus. People who stand long hours are likely to be disturbed by painful feet due to continuous strain on the arches. In such cases the pain is the result of

rigidity of the tissues and of spasms of the muscles in their effort to overcome the strain.

Twenty-six joints exist among the bones in each foot from ankle to toe tip and since joints are purely mechanical methods of changing the direction of force, they play a large part in the flexibility of the feet.

Callouses and corns are two common ailments. The former is a thickening of the normal skin caused by excessive pressure for a prolonged period of time. Corns, on the other hand, are thickenings of the skin together with the callous, but in the central portion there is a core that penetrates into the deeper tissues. Both of these conditions can be avoided, if adequate attention is paid to the care of the feet.

Bunions are a protrusion of the bone, usually at the base of the large toe. Women are the chief victims of this condition, caused by the spreading of the metatarsal bones. Their development is again encouraged by the wearing of high heels.

Ingrown toenails are another source of painful feet. These can be avoided if the nail is cut at right angles to its growth. The corners should be square rather than rounded. This will prevent the nail from penetrating the soft skin tissues.

Since the feet accumulate dirt and perspiration, they should be bathed frequently and carefully with warm soapy water. Special attention should be paid to the webbing between the toes to prevent the growth of bacteria and fungi.

Since feet carry the weight of the body, posture plays an important part in the care of the feet. Standing with the feet pointing outward, instead of forward, causes undue strain on the ligaments connecting the foot bones, especially on the inner side of the long arches. The resulting slight ache often grows to severe pain.

A little common sense in the selection of foot gear and personal habits of good hygiene in the care of the feet will do much to keep you free of painful feet.

THREE-DIMENSIONAL PHOTOGRAPHY OF HEART IN ACTION DESCRIBED

Three-dimensional x-ray photography of the heart and its chambers in action is described in the June 10 *Journal of the American Medical Association* by two Stockholm (Sweden) licentiates in medicine.

O. Axen and John Lind of the Karolinska Institute at Norrtrulls Hospital report that this is performed by means of synchronized roentgenograms (x-ray pictures) in two planes at right angles. A special table permits the taking of 10 pictures in one ray direction and 10 at right angles in the course of eight seconds.

A contrast is obtained by the injection of an opaque material into the veins. The series of photographs permits following the passage of the contrast medium through the different chambers of the heart.

By the dual photography, frontal and lateral views of the heart in the same phase of the respiratory and heart cycle can be obtained, the authors point out. A "three dimensional" view is provided by placing side by side the photographs taken simultaneously from the two positions.

"This renders possible a three-dimensional appreciation of the capacity and configuration of the separate chambers of the heart," they report. "The method is of aid in the establishment of normal standards in the living subject, and it affords increased opportunities for detection of abnormalities in the size or shape of the cavities of the heart and the great thoracic vessels.

"Moreover, the taking of roentgenograms in two different projections facilitates more nearly precise identification of each anatomic portion of the heart. Serial photography gives a concept of the dynamics of the heart. The dye (opaque material used) can be accu-

ately localized in the heart, and the changes in capacity of the chambers during the heart cycle can be estimated better."

The series of photographs is taken automatically by turning on a switch after the injection of the contrast medium. The speed can be varied from five to 10 seconds for the series, if desired.

NEWS ITEMS

Dr. Robert T. Anderson, formerly of Atlanta, announces his association with Dr. Fred Coleman at the Coleman Hospital, Dublin, in the practice of medicine.

* * *

Dr. W. E. Barfield, of Jackson, has moved to Savannah to continue the practice of Dr. M. J. Epting who is at the Parris Island, S. C. Marine Depot. This is the third time Dr. Enting has served his country, having served in World Wars I and II.

* * *

The Medical Association of Georgia recently issued a Certificate of Distinction and a gold lapel button to Dr. W. B. Brock, of Tallapoosa, for 50 years of service as a medical doctor. Dr. Brock was born in Haralson County, Georgia, March 25, 1871. He attended school in Tallapoosa, and is a graduate of Vanderbilt University. He practiced medicine in Tallapoosa for 53 years and has given his life to the service of humanity. Dr. Brock makes his home ten months of the year at 500 Majorea Ave., Coral Gables, Fla., and comes to Tallapoosa for the summer.

* * *

Dr. Enoch Callaway, of LaGrange has been re-elected president of the Georgia Division, American Cancer Society. Dr. Robert Pendergrass, Americus, was made vice-president. Dr. Calvin Stewart, Atlanta; Dr. Thomas Harrold, Macon; Dr. J. T. McCall, Rome; Dr. John Denton, Atlanta, were re-elected, and Dr. Wadley Glenn, Atlanta, was elected as a new member, of the board of directors.

* * *

The Crawford W. Long Hospital, Atlanta, held its regular monthly staff meeting on September 12 at the hospital. Program: Pediatric Section, "Fetal Mortality Statistics for June," by Dr. J. C. Flanagan; Medical Section, "Sarcoidosis", Dr. Max Michael; Surgical Section, "Management of Carcinoma of the Breast", by Dr. Calvin Stewart. At this meeting, Dr. L. C. Fischer, president of Crawford Long Hospital and Dr. Hugh Wood, Dean of Emory University School of Medicine, made short talks in regard to Crawford Long Hospital's association with Emory University.

* * *

Dr. H. B. Dean, Unadilla, recently went to Norristown, Pa., where he is a member of the staff of the Psychoanalytical Hospital and the Psychoanalytical Institute of Philadelphia. He plans to do advanced work in pediatric psychiatry. Drs. Jean Douglas McRee and Christine Jameson Ellis McRee have moved to Unadilla to take over Dr. Dean's practice. They have been stationed in Alaska with the United States Army.

* * *

Dr. William A. Dodd, a native of Macon and formerly of Dublin, announces the opening of his office in Wrightsville. He is a graduate of the University of Georgia School of Medicine, Augusta, and is a member of the Laurens County Medical Society, the Medical Association of Georgia, the American Medical Association and the Georgia Heart Association. He served an internship at the Macon Hospital, Macon, and a residency at the Crawford W. Long Memorial Hospital, Atlanta.

* * *

The Fulton County Medical Society held its semi-monthly meeting at the Academy of Medicine, Atlanta, on September 7. Program: Moderator—Dr. J. D. Martin. "Benign Giant Cell Tumor of the Synovium"; Dr. Robert P. Kelly; "Internal Drainage of Pancreatic

Cyst". Dr. William G. Whitaker, Jr.; "The Use of Radio-active Iodine in Diseases of the Thyroid", Dr. Charles Huguley, Jr. Members of the Newton and Gwinnett County Medical Societies were special guests.

* * *

Dr. Harold Scott Gamble, formerly of Columbia, Ala., announces the opening of his office in the Bailey Building, Camilla. Dr. Gamble is a graduate of the Medical College of Alabama, Birmingham, Ala., and did postgraduate work in surgery at the University of Pennsylvania School of Medicine, Philadelphia, Pa. He interned at Grady Hospital, Atlanta; taught anatomy at Louisiana State University School of Medicine, New Orleans, La., and practiced in Hartford, Headland and Columbia, Alabama. During World War II, he served at the Naval Hospital in Dublin.

* * *

Dr. J. E. Garner, Thomaston, recently had some postgraduate work in anesthesia at Presbyterian and Cook County Hospitals in Chicago.

* * *

Col. L. Holmes Ginn, Jr., of Berryville, Virginia, has been named Third Army surgeon and stationed at Fort McPherson. Col. Ginn entered the Army in 1927 upon graduation from the Medical College of Virginia, Richmond, and interned at Walter Reed Hospital, Washington. During World War II he served in the North African and Tunisian campaigns, the invasions of Sicily and Italy, and he served as surgeon, 15th Army from 1944 to 1946.

* * *

Augusta physicians who have returned to service with the Armed Forces are Dr. E. C. Hopkins, Dr. Theodore Everett and Dr. J. R. Palmer, Jr. Those who volunteered were Dr. H. B. Haston, Jr., and Dr. E. H. Dixon.

* * *

Dr. Clarence L. Laws and Dr. William F. Friedewald, Atlanta, announce their association for the practice of allergy and internal medicine at 410 Medical Arts Building, Atlanta.

* * *

Dr. Edward S. Marks, a native of Toccoa and formerly of Memphis, Tenn., recently joined the staff of Kennestone Hospital, Marietta. An Army veteran of three and one-half years of service, Dr. Marks had previously been chief of thoracic surgery at Walter Reid Hospital at Washington, D. C.

* * *

Dr. Robert B. Martin, III, Cuthbert, of Patterson Hospital staff, has been accepted as a Fellow of the American College of Surgeons. Dr. Martin served four years of military duty in World War II. He returned to Patterson Hospital in 1946 and has remained with the institution since that time.

* * *

Dr. Thomas A. McGoldrick, Jr., Savannah, recently conducted postgraduate clinics and gave a lecture on "Diseases of the Spleen" at the Veterans Administration Hospital, Duhlin, for its medical staff. Members of the Laurens County Medical Society were invited to hear Dr. McGoldrick.

* * *

Dr. Charles Mulherin, Augusta, president of the Richmond County Medical Society, has pledged full support of the society to the Crusade of Freedom campaign.

* * *

Dr. J. N. Mullins has returned to Chatsworth to resume full time practice after spending a year doing graduate surgery at Georgia Baptist Hospital, Atlanta, where he was assistant resident surgeon. His offices are located in the Cohutta Bank Building, Chatsworth.

Dr. Fenwick T. Nichols, Jr., medical officer of the Savannah Organized Naval Reserve, has been called to active duty. Lieutenant Nichols was stationed in the Pacific theater for eighteen months during World War II.

* * *

Dr. Vernon Powell, Atlanta, was guest speaker at the quarterly meeting of the Fulton-DeKalb Chapter of the American Academy of General Practice at the Academy of Medicine, Atlanta, on September 13. Dr. Powell spoke on "The Newer Treatments of Rheumatism and Arthritis".

* * *

The Piedmont Proctologic Society held its annual meeting in Hendersonville, N. C. on August 26. Dr. C. R. Deeds, of Hendersonville, N. C., was elected president; Dr. J. M. Stockman, of Knoxville, Tenn., vice-president; and Dr. C. S. Drummond, of Winston-Salem, N. C. was re-elected secretary. The next meeting of the society will be held on Saturday, March 31, 1951, at Knoxville, Tenn.

* * *

Dr. Fred H. Simonton, Chickamauga, has been appointed a member of the Georgia Board of Health and he will serve a term of six years. The appointment comes as a worthy appraisal of his experience in public health service, his years of research work, and distinctive ability in his field.

* * *

Dr. Lewis S. Sims, Jr., Lincolnton, has returned to Naval Medical Service. He reported for duty at the Naval Air Station, Jacksonville, Fla., September 15.

* * *

Dr. Carter Smith, Atlanta, was elected president of the Georgia Heart Association at its second annual meeting held recently in Atlanta. Other officers are: Dr. Harry T. Harper, Jr., Augusta, vice-president; Dr. Gordon Barrow, Atlanta, secretary. Directors are: Dr. Goodloe Y. Erwin, Athens; Dr. Henry Tift, Macon; Dr. Herbert Tyler, Thomaston; and Dr. John L. Elliott, Savannah. Dr. T. Sterling Claiborne, Atlanta, former president of the association, Dr. Carter Smith and Dr. Harry T. Harper, Jr. will be Georgia's delegates to the Assembly of the American Heart Association.

* * *

The annual meeting of the Southeastern States Cancer Seminar will be held in Jacksonville, Fla. on November 8, 9, 10, 1950 at the George Washington Hotel auditorium. The Duval County Medical Society is in charge of arrangements and will serve as host to the hundreds of physicians expected to attend. This annual seminar is sponsored by the Florida Division of the American Cancer Society and the Florida State Board of Health with the cooperation of the Florida Medical Association. There is no tuition. The program has been arranged so as to appeal to all doctors and covers the entire field of malignant disease.

* * *

Dr. Edward Roe Stamps, Macon, has recently opened office in the Bibb Building for the practice of urology. He is a graduate of Emory University School of Medicine, and served internship at Grady Memorial Hospital, Atlanta. Following his discharge from the Army, Dr. Stamps entered the practice of urology as a junior partner in the office of Dr. W. F. Reavis and Dr. L. W. Pierce, of Waycross, where he has been located for the past four years.

* * *

Dr. Cleve Thompson, Jr., formerly of Millen, recently opened his offices in Waynesboro, for the practice of medicine and surgery. Dr. Thompson graduated from the University of Georgia School of Medicine, Augusta, in 1949, and interned at Macon City Hospital, Macon. He will be associated with his father, Dr. Cleve Thompson, formerly of Millen, where

he owned the Millen Clinic. The two physicians plan to occupy offices which they will construct on Fourth Street, near the Burke County Hospital, Waynesboro.

* * *

Dr. Thomas J. Van Sant, a native of Woodstock, announces his association with Dr. D. Lloyd Wood, Dalton, for the practice of medicine and surgery. Dr. Van Sant graduated from the University of Tennessee College of Medicine, Memphis, Tenn., and interned at St. Joseph's Infirmary, Atlanta. For the past three years he has done postgraduate work in internal medicine at Kennedy Hospital, Memphis, Tenn.

* * *

Dr. P. L. Williams, Jr., a native of Cordele, announces his association with his father, Dr. P. L. Williams, Sr., Cordele, in the practice of medicine and surgery. Dr. Williams was graduated from the University of Georgia School of Medicine, Augusta, in 1947, and interned at Greenville General Hospital, Greenville, S. C. He was resident of the Macon City Hospital, Macon, and chief resident in surgery during the past two years.

* * *

Dr. William B. Fackler, Jr., formerly of Lawson VA Hospital, Chamblee, announces his association with the Clark and Holder Clinic, LaGrange.

* * *

Dr. Walter W. Daniel, Atlanta, was recently guest speaker at the Clayton-Fayette Medical Society. His subject was "Etiology of Eclampsia."

* * *

Dr. Lewell S. King and Dr. Emory H. Main, College Park, announce the removal of their offices to 105 Princeton Avenue, College Park, for the practice of surgery and internal medicine. The above named offices were formerly occupied by the late Dr. Charles H. Daniel.

* * *

The Fulton County Medical Society held its semi-monthly meeting at the Academy of Medicine, Atlanta, on September 21. Program: Moderator—Dr. Elizabeth Gambrell, "Blood Magnesium"; Dr. Amey Chappell, "New Laboratory Aids in Diagnosis Thyrotoxicosis"; Dr. Philip K. Bondy; "Thyroid Adenoma"; Dr. David Henry Poer.

* * *

Brief History of Adel Physicians: Dr. J. B. Oliphant is a graduate of the University of Georgia School of Medicine, Augusta, and interned in Augusta and Baltimore, Md. He has had postgraduate work in obstetrics in New York and New Orleans. He formerly practiced in Augusta, but has been practicing in Adel since 1934.

Dr. Fred Clements, son of Dr. H. W. Clements, graduated from the University of Georgia School of Medicine, Augusta, in 1943, and interned one year at the Macon Hospital, Macon, prior to his military service. He spent three years with the Army and a great part of his time was spent in a general hospital in England. In 1948 he took a postgraduate course in surgery at the New York Polyclinic Medical School and Hospital, New York. He has been practicing in Adel since 1946.

Dr. W. R. Schnauss graduated from the University of Georgia School of Medicine, Augusta, in 1916, and served his internship at St. Luke's Hospital, Duval Medical Center, and St. Vincent's Hospital, all in Jacksonville, Fla. His first private practice was in Jacksonville, Fla. He is a veteran of World War I.

Dr. H. W. Clements graduated from the University of Georgia School of Medicine, Augusta, in 1900. Before coming to Adel, he practiced in Hahira, Lenox, and Ray City. He has done postgraduate work in Chicago and New York.

Dr. L. R. Hutchinson graduated from the Atlanta Medical College in 1914 and interned at Grady Hospital in Atlanta. Except for a few years in Miami

and in the Army, he has practiced in Adel. Dr. Hutchinson has attended clinics at Emory University and Chicago.

* * *

Dr. Albert A. Rayle, Jr., Atlanta, was recently named by Emory University to its medical staff. Dr. Rayle was graduated from Emory University School of Medicine, Atlanta, in 1944, and also attended Columbia University College of Physicians and Surgeons, New York City. He is associated with his father, Dr. Albert A. Rayle, 478 Peachtree Street, N. E., Atlanta.

* * *

The Georgia Vocational Rehabilitation Division recently held a week long conference at the General Oglethorpe Hotel on Wilmington Island, Savannah. The first session began with the portion of the program devoted to physical restoration of handicapped persons. Dr. Thomas P. Goodwyn, Atlanta, state medical consultant to the vocational rehabilitation workers, presided. Speakers and their subjects were: Dr. John L. Elliott, Savannah, "Rehabilitation of Tubercular Patients"; Dr. Osler A. Abbott, Atlanta, "Chest Conditions Feasible for Rehabilitation"; Dr. T. G. Peacock, Milledgeville, "Rehabilitation of Persons Discharged from Mental Institutions"; Dr. Joseph S. Skobba, Atlanta, "Psychiatric Conditions Feasible for Rehabilitation"; Dr. Marion C. Pruitt, Atlanta, "Rectal Diseases Considered Feasible for Rehabilitation"; Dr. Alton V. Hallum, Atlanta, "Visual Defects that Respond to Treatment"; Dr. Ben H. Clifton, Atlanta, "Nervous Conditions"; Dr. Jeff L. Richardson, Atlanta, "Problems of High Blood Pressure"; Dr. Robert Ellison, Augusta, "Surgical Treatment of Heart Conditions"; Dr. Ernest F. Wahl, Thomasville, "Treatment of Ulcers in the Stomach and Intestinal Tract"; Dr. James K. Fancher, Atlanta, "Endocrinologic Conditions Feasible for Rehabilitation", and Dr. Frank F. Kanthak, Atlanta, "Deformities of the Jaw".

* * *

The Second District Medical Society held its dinner meeting at Radium Springs, Albany, October 12. Program: Call to order by Dr. Robert M. Joiner, Moultrie, president. Reading of minutes; introduction of visitors, announcements, appointment of committees. Scientific program: "Experience with ACTH, and Cortisone in Various Endocrine and Non-Endocrine Conditions"; Dr. Robert B. Greenblatt, Augusta; "The Problem of Gout", Dr. George R. Dillinger, Thomasville; "Kodachrome Clinic—Pediatric Cases", Dr. Mack Sutton, Albany, and Cervical Smear as a Routine Office Procedure", Dr. Charles G. Bellville, Bainbridge. Officers are Dr. Robert M. Joiner, Moultrie, president; Dr. Milton Berry Bowman, Albany, vice-president; and Dr. Frank A. Little, Thomasville, secretary.

* * *

The South Georgia Medical Society held its regular meeting at the Country Club, Valdosta, September 12. Surgery under combat conditions was vividly illustrated to members of the society as they viewed actual photographs taken during World War II at the 74th field hospital center on Okinawa. The film was taken by Dr. William C. Roberts, of Panama City, Fla., while he was on combat duty in the South Pacific during World War II. It has been proclaimed by the Surgeon General of the Army as the only film of its kind in existence. The photography was done by Dr. James A. Johnson, Jr., of Manchester, also assigned to the field hospital. The film is to be used for Armed Services training purposes and has been copyrighted in the name of Dr. William C. Roberts. Dr. James L. Campbell, Jr., Valdosta was program chairman for the meeting. In a brief business meeting, two committees were appointed by Chairman Dr. John Raymond Smith, of Hahira, in response to communications from the American Medical Association. Dr. Alex G. Little, Valdosta, was named chairman of the public relations committee and asked to choose his own committee.

Dr. W. R. Schnauss, Adel, Dr. Earle S. McKey, Jr., and Dr. Bennet G. Owens, both of Valdosta, were named to the hospital medical committee. A committee headed by Dr. James L. Campbell, Jr., Valdosta, was named to make recommendations concerning insurance programs in the county. Dr. Campbell introduced a request from Dr. Daniel B. Terry, of Homerville, that Blue Cross and Blue Shield be considered. A representative of an insurance company from Jacksonville, Fla. asked that his firm be considered also. Other members of the committee are: Dr. W. W. Turner, Nashville; Dr. J. B. Oliphant, Adel, and Dr. John Raymond Smith, Hahira. Dr. Jesse Parrott, Hahira, secretary.

* * *

The Seventh District Medical Society held its meeting at Fairyland Club on Lookout Mountain, September 27, as guest of Walker-Catoosa-Dade Medical Society. Program: Invocation by the Rev. George H. Murphy, pastor of the Church of Good Shepherd, Lookout Mountain; Address of Welcome, Dr. Howard C. Derrick, LaFayette; Reading of minutes; report of committees and councilor. Introduction of new members. Scientific program: Address by Dr. A. M. Phillips, Macon, president of the Medical Association of Georgia; "Differential Diagnosis of Diseases of the Lungs", Dr. Rufus F. Payne, Rome; "Chemotherapy and Antibiotics", Dr. Paul B. Beeson, Atlanta; "Instructions for the Psychosomatic Patient", Dr. Hal M. Davison, Atlanta. Questions for the essayists conducted by Dr. Davison. Officers are: Dr. Lee H. Battle, Rome, president; Dr. S. B. Kitchens, LaFayette, secretary-treasurer, and Dr. Lloyd Wood, Dalton, councilor.

The Woman's Auxiliary to the Seventh District Medical Society held its meeting at the Fairyland Club, Lookout Mountain, September 27. Program: Welcome by Mrs. Howard C. Derrick, LaFayette; Response by Mrs. Inman Smith, Rome; Reading of minutes, reports from county auxiliaries, new business and election of officers. "A Discussion of Nutrition", Dr. Hal M. Davison, Atlanta. Officers are: Mrs. Harry Mull, Rome, District Manager; Mrs. Emmett Brannon, Rome, Vice District Manager, and Mrs. William Harbin, Jr., Rome, secretary.

COMMUNICATIONS

1950 DIABETES DETECTION DRIVE

AMERICAN DIABETES ASSOCIATION, Inc.
New York 18, N. Y., September 12, 1950

To: Secretaries of County and State Medical Societies:
Plans for Diabetes Week—November 12-18, 1950— are now far advanced, and over 500 State and County Medical Societies have indicated their intention of taking part in this year's program.

There is still time for your medical society to form a Committee on Diabetes and to participate in the Diabetes Detection Drive. Why not present this matter now to your society for action?

The Diabetes Detection Drive, sponsored by the American Diabetes Association, is the only large-scale health education and disease detection program developed exclusively by the medical profession. It offers physicians an unusual opportunity to sponsor and implement a constructive public relations program, as well as a way of performing a genuine service for the citizens of their local communities. No chronic disease can be so easily and inexpensively detected as diabetes, nor can any other similarly serious illness be so effectively managed—always providing that the medical profession takes an aggressive lead in carrying through such a program.

In order to be a success, the Diabetes Detection Drive—which has been approved three years in succession by the American Medical Association—requires a concentrated effort on the part of all of us. We hope that your society will take up the challenge this year, and will organize an all-out detection program

for Diabetes Week.

The American Diabetes Association has prepared a series of practical, easy-to-use pamphlets on how to organize and promote a Diabetes Detection Drive. Copies of two of these pamphlets are herewith enclosed. Suggestions on how to organize a Committee on Diabetes in your society are given on page 4 of the pamphlet, "Organizing a Successful Diabetes Detection Drive."

A form on which you can let us know what action your Medical Society takes on this matter is attached, together with a self-addressed return envelope. Do not hesitate to get in touch with us if you want any additional information or literature.

Very cordially yours,

JOHN A. REED, M.D., Chairman
Committee on Diabetes Detection.

* * *

UNIVERSITY OF GEORGIA SCHOOL OF MEDICINE

Augusta, Georgia
September 14, 1950

Dr. Edgar D. Shanks, Editor

The Journal of the Medical Association of Georgia,
Atlanta, Georgia

Dear Dr. Shanks:

The annual Obstetric Seminar will be held on November 13-17, 1950, at the Medical College of Georgia, Augusta, Georgia. This is under the auspices of the Division of Maternal and Child Health of the State Board of Health of Georgia, Florida and South Carolina.

Speakers will include nineteen diplomates of the American Board of Obstetricians and Gynecologists.

We would appreciate it if you would list this in your meeting notices.

Sincerely yours,

RICHARD TORPIN, M.D.

Professor and Chairman, Department
of Obstetrics and Gynecology.

RESEARCH GRANTS MADE TO EMORY PROFESSORS

About \$35,000 in medical research grants were earmarked recently for Emory University, according to the announcement by the federal security administrator. The grants, made by the Public Health Service, are part of \$4,000,000 approved by the Surgeon General upon the recommendations of the National Advisory Health Council.

Funds will go to 144 institutions in 39 states, with Emory University receiving four of the six made in Georgia.

The two largest Georgia grants go to Dr. John L. Patterson, assistant professor of physiology, and Dr. Albert Heyman, assistant professor of medicine, for studies on diseases of the brain, and to Dr. Walter H. Sheldon, chairman of the department of pathology, and Heyman for studies on the Herxheimer reaction in syphilis. Dr. Stephen W. Gray, associate professor of anatomy, will conduct research in effect of high gravitational environment on cell and tissue growth, Dr. Paul H. Beeson, associate dean of the School of Medicine, will do research in leptospiral meningitis.

DR. R. E. DYER COMES TO EMORY

The retirement of Assistant Surgeon General R. E. Dyer, Director of the National Institutes of Health, on October 1, was announced recently by Dr. Leonard A. Scheele, Surgeon General of the Public Health Service, Federal Security Agency.

In Atlanta, officials of Emory University announced simultaneously that Dr. Dyer had accepted appointment as director of research at the Robert Winship Clinic of the Emory University Medical School.

Dr. Dyer has spent 34 years in the Public Health Service. He has served since 1942 as director of the National Institutes of Health, research branch of the

service with permanent laboratories at Bethesda, Md., and field research projects in many other places in this country and abroad.

OBITUARY

Dr. Bentley Childs Adams, aged 53, one of Thomaston's leading physicians and prominent citizens, died August 28, 1950. Dr. Adams was born in Carsonville district, Taylor County, the son of the late Mr. and Mrs. Arch Adams and with his parents moved to Thomaston when he was six years of age. He graduated from Emory University School of Medicine, Atlanta, in 1923, and he interned one year at Macon Hospital, Macon. He spent his entire professional life ministering to the sick of Thomaston and Upson County. In 1924 he became associated with Dr. R. L. Carter, Thomaston. The two physicians opened a clinic and at the time of Dr. Adams' death they were operating The Clinic, Thomaston, with Dr. T. A. Sappington and Dr. A. A. Arrington. Dr. Adams was a member of the Upson County Medical Society, the Medical Association of Georgia and a fellow of the American Medical Association. He was a member of the First Baptist Church, and served as a deacon and treasurer of the church. His community interests were numerous, and besides his church work, he was a Mason and a Shriner. Dr. Adams was a member and past president of the Thomaston Kiwanis Club, and a director of the Thomaston and Upson County Chamber of Commerce. He served a term on the Thomaston Board of Education. In addition to his work with young people on the athletic field, he also worked with Boy Scouts. He was a member of the Flint River Boy Scout Council and devoted much time and talent to Scouting. He is survived by his wife; a daughter, Mrs. Jim Woods, Atlanta; a son, Bentley Adams; three sisters and three brothers. Funeral services were held in the unfinished auditorium of the First Baptist Church with the pastor, the Rev. Raymond C. Moore officiating, and the Rev. Richard F. Simpson and the Rev. J. M. Windham assisting. Burial was in the Glenwood Cemetery, Thomaston.

* * *

Dr. Everette Iseman, aged 65, died at his home, 302 East Forty-sixth Street, Savannah, September 3, 1950. Dr. Iseman was a native of Spartanburg, S. C., the son of the late Simon Iseman and Ellen Levi Iseman. He graduated from the University of Maryland School of Medicine and College of Physicians and Surgeons, Baltimore, Md., in 1909, and interned at the Hebrew Hospital, Baltimore. He lived in Manning, S. C., before moving to Savannah. He was a member of the Georgia Medical Society, the Medical Association of Georgia and the American Medical Association. A veteran of World War I, Dr. Iseman was a member of Savannah Post No. 135, American Legion. We quote from the editorial pages of the *Savannah Press*, September 4, 1950:

"Many Savannahians in all walks of life lost not only a physician but a friend when Dr. Everette Iseman succumbed yesterday after an illness of several weeks. He had been active in his profession here for 37 years, ministering to his patients without regard to self up until the very hour that he was stricken. It had been hoped that with rest he could recover his strength, but the strain on his endurance through the years had been too much.

"No one ever needed Dr. Iseman's services without being able to get him, regardless of the hour or weather. A capable physician and surgeon, he combined his knowledge with a personal interest in every patient that won him a place of affectionate esteem among the high placed and the humble. It was indicative of the spot that Dr. Iseman held in the hearts of those to whom he administered that when news of his serious illness became known individual and

collective prayers were offered in many homes and churches for his recovery.

"More than a generation had grown up under Dr. Iseman and as a physician he had watched the cycle of life in countless families. With them he had rejoiced in times of happy events and he had employed his skills to lighten their dark hours. Truly, there are many to recall him not alone as doctor but friend."

He is survived by his wife, Mrs. Doris Smith Iseman; one daughter, Mrs. Milton F. Eisenberg, both of Savannah; two sisters and two grandchildren. Funeral services were held at Mike Israel Synagogue, conducted by Rabbi Solomon E. Starrs. Burial was in Bonaventure Cemetery, Savannah.

PLAY SAFE WITH DRUGS

The indiscriminate use of drugs can be costly, not only from an economic standpoint but in the value of lives lost or damaged, the Educational Committee of the Illinois State Medical Society cautions in a *Health Talk*. With the unfortunate emphasis today on sleep inducing agents called barbiturates, the antihistamines and the antibiotics as "cure alls", it is no wonder that the public is confused.

Properly handled under competent medical supervision, these drugs have a useful place in alleviating pain and curing disease. Frequently, for example, it is necessary to prescribe a sedative, but sleeping pills and powders as a regular habit can be extremely harmful. When the body and mind are functioning normally, there is no need for drugs to make you sleep.

The antihistaminic drugs are a product of the research laboratory which marks the advance of medicine in the curative field. Handled carefully, these drugs are producing good results in some conditions related to allergy, but they are also causing severe reactions in certain individuals. Histamine is a chemical normally present in the body which, in some persons, is the factor involved in allergic conditions, such as hives, hay fever and other sensitivities. Thus the antihistaminic drug is a compound designed to fight this chemical reaction in the body, which makes some people more sensitive than others to certain conditions.

Because so many antihistaminic drugs are now marketed does not mean that they are safe or that they are the answer to the mystery of the common cold which is characterized by symptoms similar to forms of allergy, such as itching and swelling of the nasal membranes, tearing of the eyes, and the like.

Taken indiscriminately, the antihistaminic drugs can kill. They can also be the means of causing death and injury, since they produce side-effects in certain persons that make them unsafe to drive a car, for example. These side-effects include nausea, vomiting, headaches, poor coordination and drowsiness.

Antibiotic drugs are another group which must be handled carefully. Taking its name from anti meaning against and bio meaning living tissue, this group then fights organisms or bacteria either by destroying them completely or decreasing their growth. There are numerous antibiotic drugs, all of which work differently in various conditions. They too produce different reactions necessitating the watchful supervision of a physician.

Research is necessary to learn the cause and cure of disease. Research brings knowledge and knowledge is power—the power to save life and relieve pain. But indiscriminate use of drugs will undo the good that is being accomplished. Self-medication is not the product of medical research, for it brings illness and unhappiness instead.

Too much of one drug can produce toxicity or poisoning in the chemical substances of the body, a condition which results in drowsiness, a mental stupor,

a difficulty in walking and talking and noticeable tremors of the tongue, lips and fingers.

Don't listen to the flamboyant advertising on drugs. Be suspicious of anything that is presented as a "cure-all". Be cautious. You don't know how one taken blindly may affect you.

LINK FOOT ERUPTIONS TO SHOE MATERIALS AND CONSTRUCTION

Rapid increase in foot eruptions has paralleled the use of certain materials, particularly waterproof materials, in manufacturing footgear, two Evansville (Ind.) dermatologists point out.

Writing in the July issue of *Today's Health*, published by the American Medical Association, Drs. L. Edward Gaul and G. B. Underwood say:

"Parents can learn something from instinctive actions of their children. Instead of calling their toe itch the fungus or athlete's foot and promptly rubbing in an irritating remedy, they should (like their children) kick off their shoes.

"The financial setbacks of the shoe industry in 1919 sent fabricators scurrying for cheaper materials. Time-proved leather was replaced by rubber and adhesives, by bonded, laminated, coated and impregnated fabrics and papers. Various plastics are now replacing these. The result is that we have steadily exposed our feet to a wide variety of chemicals."

Foot eruptions are the third most common skin disease, the doctors find. One survey indicated that three out of four people have foot eruptions. Careful studies by dermatologists have shown fungus to be the cause in approximately 50 per cent of cases.

"Certainly the rapid increase in foot eruptions paralleled the use of cheaper materials in manufacturing footgear, and particularly waterproof materials," the doctors say. "Tanners and processors have succeeded in destroying the natural porosity and absorbent properties of leather. Various chemicals highly irritating to the skin are added. Zealous manufacturers seal any porosity left in leather with moisture-resistant adhesives and cements.

"To make sure that none of the sweat from the sole can evaporate, beneath the insole is a bottom filler that seals out wet weather. Anything on hand that will not dissolve in water is used as filler. One combination consists of asphalt and a mass of cemented rubber, containing pieces of cork. These substances ooze up through tack holes and cracks and make the feet sweat, burn, itch and break out.

"Contact of an impervious material like rubber sheeting, plastic or painted leather with the skin is soon followed by an accumulation of moisture. This results from unconscious sweating. In hot weather the sweat increases. If the sweat cannot evaporate, the cooling effect of evaporation is lost and the skin heats up.

"An annoying burning sensation results. The skin swells, blood vessels dilate and the functions of the skin as a protective covering for the body are quickly lost. Then the chemical irritants in the shoes work their havoc. The feet burn, smart, itch, become reddened and soon break out. The thin skin between the toes is white and soggy, a warning that the shoes do not allow the sweat to evaporate.

"Investigators emphasize that fungi grow and thrive in moisture. Water-tight shoes provide ideal growth and multiplying conditions. Future footgear should take care of two basic needs: (1) rapid dissipation of sweat from the feet; (2) dryness in wet weather. Loose-fitting ruhers allow air movement around the shoes. This protection should be removed as soon as the wearer is in a dry place.

"Nature furnished us with a delicate alarm system for detecting irritations of the skin. Its warnings are itching, burning, stinging and swelling. If these

symptoms appear, suspect your shoes at once. More severe warnings are redness, blisters and 'weeping'."

RESPIRATOR "BREATHES" FOR POLIOMYELITIS VICTIMS

A respirator which enables victims of the bulbar type of poliomyelitis to breathe almost in a natural manner has been developed by a group of Boston doctors.

In contrast to older forms of artificial respiration by means of pressure, the new respirator operates through electrical stimulation of a point on either of the phrenic nerves, which run down each side of the neck into the diaphragm.

Drs. Stanley J. Sarnoff, James V. Maloney, Jr., Benjamin G. Ferris, Jr., and James L. Whittenberger, and Charlotte Sarnoff, all of the Harvard School of Public Health, describe the use of the respirator in the August 19 *Journal of the American Medical Association*.

Acute bulbar poliomyelitis is the form of the disease in which the enlarged upper part of the spinal cord, popularly called the "bulb", is affected. Since this area contains vital centers that control respiration and the heart, involvement can be severe enough to interfere with breathing. It has become general practice not to place a patient so affected in a tank respirator, since this may increase the respiratory difficulty, the doctors say.

"Supportive therapy, with painstaking attention to maintaining an unobstructed airway, has remained the cardinal principle in the management of this form of the disease," the doctors point out. "Phrenic stimulation has not been used previously in bulbar poliomyelitis.

"Respiration was produced by applying a moistened, cloth-covered electrode externally over the skin at the site of the motor point of the phrenic nerve."

The first patient to receive electrophrenic respiration was a 9-year-old boy who was brought to the Children's Hospital in July, 1949. He was acutely ill and spontaneous respiration had become highly irregular.

"The patient's residual paralysis gradually disappeared almost completely," the doctors report. "In December 1949 he could swallow, had gained weight almost to his presumer level and had recovered sufficiently to engage successfully in his favorite sports, ice skating and ice hockey."

Successful use of the respirator on eight other patients is reported by the doctors. However, they add:

"The usefulness of the electrophrenic respirator cannot be considered as established in bulbar poliomyelitis until additional experience has been obtained, but the data are encouraging. It is obvious that one phrenic nerve must be wholly or partially uninvolved by disease if effective electrophrenic respiration is to be performed.

"The extraordinary extent and severity of central nervous system derangement that can exist and still be reversible if the critical demands of the respiratory and circulatory systems are met has been demonstrated. The electrophrenic respirator consistently and strikingly diminished the restlessness and hypertension in one patient and achieved similar results in others."

The study was aided by a grant from the National Foundation for Infantile Paralysis, Inc.

RESENTMENT CAN CAUSE HIVES, DOCTORS' STUDY SHOWS

A close relationship between an attitude of resentment and development of hives (commonly known as nettle rash) is shown by a study made by two New York doctors.

"Thirty unselected cases of chronic hives were

investigated to determine the relationship between stressful life situations and processes responsible for the disease." Drs. David T. Graham and Stewart Wolf of Cornell University Medical College say in the August 29 *Journal of the American Medical Association*.

"Attacks were highly correlated with emotional disturbances of a particular kind. Traumatic life situations responsible for lesions were almost exclusively those in which the patient felt resentment because he saw himself as the victim of unjust treatment about which he could do nothing.

"In brief, these patients considered themselves wronged or injured (usually by someone in a fairly close family relationship), and they regarded the situation as one which precluded any action on their parts. They believed that they could neither retaliate nor run away. In this setting, they became intensely resentful.

"All the subjects were seen to flush when topics of significant personal concern were brought up for discussion. Five subjects had lesions while discussing their problems.

"In general, as a group the patients had not only failed to express hostility but tended not even to feel it. They had for the most part adopted a rather passive attitude toward punishment from parents or other superiors. This was sometimes the result of being exposed to authoritarian parents who tolerated no expressions of aggression.

"One man apparently came to a decision that there were more rewards in conforming to his father's wishes than in rebelling. Another was brought up by his mother and aunt to feel guilty about hostile feelings or behavior and almost all tendencies to action on his part had been frustrated by adults. In at least two women the difficulty seemed to be principally that they found hostility unacceptable in terms of their standards of proper behavior.

"The failure to find 'allergic' factors is of interest. Many of the patients had already tried eliminating from their diets various foods which they had suspected of being responsible for their diseases. However, this group may not represent a truly random sample of persons with chronic hives.

"All the evidence presented with respect to skin changes indicates that the difficulty is an increased tendency of (blood) vessels to dilation. The vessels behave as they would have if the person actually had been receiving blows."

SOME OF THE MOST IMPORTANT "FAMOUS FIRSTS" IN THE HISTORY OF MAN'S HUMANITY TO MAN IN THE UNITED STATES:

1727—*First Children's Institution*: founded by Ursuline Nuns in New Orleans to care for children orphaned by Indian massacre.

1752—*First Hospital*: Pennsylvania Hospital, Philadelphia. Cornerstone laid by Benjamin Franklin. Now a Red Feather service.

1851—*First Group Work Agency*: Boston YMCA, December 29. Patterned after "Y" in Montreal. 644 Y's are Red Feather services of local Community Chests today.

1853—*First Foster Home service for children*: The Children's Aid Society of New York was the first to place dependent or neglected children in "foster homes," rather than in orphanages.

1854—*First Day Nursery*: Following in the wake of the French "creche" movement in Paris, a "Nursery for Children of Poor Women" was established in New York City in 1854. Now, many day nurseries are supported through Community Chests.

1877—*First Visiting Nurse Association*: New York

City. Visiting Nursing is now one of the most important of the Red Feather services.

1877—*First Family Service Society*: Buffalo, N. Y. Established to "do away with the whole indiscriminate method of almsgiving" and to "organize the charitable impulses and resources of the community in behalf of families in need according to their need."

1887—*First United Fund-Raising Campaign*: The "Associated Charities", Denver, Colorado. Included 23 health and welfare services.

1909—*First Council of Social Agencies*: Milwaukee, Wis., and Pittsburgh, Pa. There are now 400 Councils throughout the United States, often called now "Community Welfare Councils".

1913—*First Community Chest*: Cleveland, Ohio, established the first united fund-raising campaign with budgeting and social planning.

1945—*First Adoption of Red Feather As National Symbol* of the community Chests and Councils of America.

There are now fifteen thousand Red Feather services, supported by Community Chests, many of which are direct descendants of these "Famous Firsts".

NOTE: If you are interested in full details on any of these leads, please write to Magazine Service, Community Chests and Councils of America, 155 East 44th Street, New York 17, N. Y. (MU 7-8300).

NEW BOOKS

Operative Technic in Specialty Surgery. Edited by Warren H. Cole, M.D., F.A.C.S., New York: Appleton-Century-Crofts, Inc., 1949.

There are 21 contributors to this book which is edited by Dr. Warren Cole, an outstanding surgeon. The specialties include plastic surgery, thoracic surgery, orthopedic surgery, neurosurgery, gynecology and male urology. Many of the chapters include descriptions of basic anatomy and physiology which is helpful to the general surgeon.

The section on plastic surgery deals with wound healing, skin grafting and definitive procedures most commonly employed.

The section on thoracic surgery describes the technics of thoracoplasty, pulmonary resection, diaphragmatic hernia and cardiac surgery in detail.

The section on orthopedic surgery is well organized, describing both closed and open methods for fracture reduction. The section on neurosurgery covers trauma, infection, brain tumors, spinal cord, cranial nerves and peripheral nerve. The autonomic nervous system is also covered.

The section in gynecological surgery describes procedures which have been useful to the authors eliminating discarded procedures.

This book will be a help to the resident surgeon and the general surgeon doing some specialized procedures.

WILLIAM P. LEONARD, M.D.

* * *

The Pathogenesis and Pathology of Viral Diseases edited by John G. Kidd, M.D., Department of Pathology, The New York Hospital—Cornell Medical Center. New York Academy of Medicine, Section on Microbiology, Symposium No. 3. 235 pages, 6 x 9 inches, illustrated. New York, Columbia University Press, 1950. Price: \$5.00.

This is the third of a series of important and distinguished volumes to come from the symposia held by the Section on Microbiology on the New York Academy of Medicine. The papers in this volume contain the latest information in the relatively new and growing field of virology. Being cellular parasites, viruses are best studied in their relationship with cells. This important phase of virology is covered thoroughly in these papers. They contain data not duplicated in any other single volume. Much of the information is

completely new, notably most of that on electron microscopy of viruses. The subjects are presented by twelve authorities, all of whom have worked long in the field of virus diseases and have published widely. The book is well illustrated with charts and photomicrographs.

* * *

Williams Obstetrics by Nicholson J. Eastman, Professor of Obstetrics in Johns Hopkins University School of Medicine, and Obstetrician-in-Chief of the John Hopkins Hospital. 10th edition, 1200 pages, 696 illustrations. New York, Appleton-Century-Crofts, Inc., 1950, Price: \$12.50.

Over half of this new 10th edition, originally written by J. Whitridge Williams and revised in its 7th, 8th, and 9th editions by Henricus J. Stander, has been completely rewritten by the present author in order to provide the practicing physician and the student with a complete and thoroughly modern text. Recognizing the need for continued strong emphasis on sound fundamentals, Dr. Eastman has strengthened those sections and in addition he has built up and considerably enlarged the sections on prenatal care, the treatment of the complications of pregnancy, the handling of the delivery, the details of operative procedures, and the uses of all the most modern, recognized methods for the further necessary reduction of maternal and infant mortality. Historical data and theoretical considerations have been reduced to an absolute minimum in order to give the practitioner and student information of a more practical type.

* * *

The Ethical Basis of Medical Practice, by Willard L. Sperry, Dean of the Harvard Divinity School, with a foreword by J. Howard Means, M.D., Jackson Professor of Clinical Medicine, Harvard University Medical School. Pp. 185. New York: Paul B. Hoeber, Inc., 1950. Price \$2.50.

This book is of special interest to both practitioners and medical students. It grew out of a lecture given to house officers at the Massachusetts General Hospital. Dean Sperry is more concerned with defining and clarifying the basic moral problems that confront the physician than with providing a ready-made set of answers. He considers such topics as the general relations of science and ethics, the basic distinction between a profession and a trade, the influence of specialization upon ethical standards, and the meaning of "reverence for life" to the modern scientist. In two well-balanced and thoughtful chapters the author examines both the pros and cons of euthanasia. Throughout the book, the reader—physician, pastor or patient—will find clarity, penetrating vision, and a wise absence of dogma.

* * *

A Textbook of X-Ray Diagnosis, edited by S. Cochran Shanks, M.D., F.R.C.P., F.F.R., Director, X-Ray Diagnostic Department, University College Hospital, London; and Peter Kerley, M.D., F.R.C.P., F.F.R., D.M.R.E., Director, X-ray Department, Westminster Hospital; Radiologist, Royal Chest Hospital, London. Volume IV (Bones, Joints and Soft Tissues), Second Edition. 592 pages, 6x9 inches, with 533 illustrations. Philadelphia and London, W. B. Saunders Company, 1950. Price \$15.00.

This volume IV is one of four books in the new (2nd) edition. The other three will be released in the near future. This book covers adequately all common lesions of the bones, joints and soft tissues, with the material subdivided into eleven parts as follows: The Normal Bones and Joints; The General Pathology of Bone; Congenital Deformities of Bones and Joints; Traumatic Lesions of Bones and Joints; Inflammatory Diseases of Bone and Joints; Osteochondritis; Static and Paralytic Lesions, the Intervertebral Discs, Orthopedic Operations; Constitutional Diseases of Bones

and Joints; Tumors and Cysts; the Soft Tissues; and Localization of Foreign Bodies. The x-rays are brilliantly reproduced; the accompanying text is clear, concise, and highly informative. This volume is a worthy successor to the famous volume of the First Edition.

* * *

Techniques in British Surgery, edited by Rodney Maingot, F.R.C.S. England, Surgeon, Royal Free Hospital, London; Senior Surgeon, Southend General Hospital. 733 pages, 6 $\frac{3}{8}$ " x 9 $\frac{3}{4}$ ", with 473 illustrations. Philadelphia and London, W. B. Saunders Company, 1950. Price: \$15.00.

Twenty-nine topflight British surgeons contributed to this book detailed accounts of the operative technics they have perfected—technics that are acknowledged to be the most effective known in Great Britain at the present time. While step-by-step procedure is emphasized and demonstrated in more than 1000 pictures on 473 figures, a well-balanced amount of attention is paid to pre- and postoperative care, prevention and treatment of complications, and general management of the case. General and special surgeons, practitioners, and many specialists will find this new volume a real storehouse of thoughts, hints, helps—ideas that can be applied in whole or in part to their own practices.

* * *

Aseptic Treatment of Wounds, by Carl W. Walter, M.D., Assistant Professor of Surgery, Peter Bent Brigham Hospital, Director of Laboratory for Surgical Research, Harvard Medical School. 372 pages, 255 figures made up of 974 line drawings. New York, The Macmillan Company, 1948. Price: \$9.00.

This book contains a complete summary of the latest facts on methods of preventing postoperative infection and sepsis—the methods by which the surgeon, his assistants, and all the materials that enter into a surgical procedure are rendered aseptic. Each chapter contains a description of apparatus, equipment, and instruments required for the particular method of asepsis under discussion. There are instructions for their use and maintenance. We recommend this book to anyone connected in any way with surgical field, such as physicians, surgeons, medical students and nurses. The technic described expresses the surgical philosophy of Elliott C. Cutler and Harvey Cushing. The illustrations by Mildred Coddling, well-known medical illustrator, provide minute dramatization of each step involved in a technic.

* * *

Principles of Public Health Administration by John J. Hanlon, M.S., M.D., M.P.H., Associate Professor of Public Health Practice, School of Public Health, University of Michigan, and Chief Medical Officer and Associate Chief of Party, Bolivia, The Institute of Inter-American Affairs. 506 pages with 48 illustrations. St. Louis, The C. V. Mosby Company, 1950.

Dr. Hanlon has divided his book into three main parts: (1) An Introduction, containing chapters on the philosophy, background and development, and socioeconomic justification of public health activities; (2) Administrative Considerations in Public Health; and (3) Pattern of Public Health Activities in the United States. Wide use is made of excellent illustrative charts and tables. This volume, the newest of its kind published in the United States, is recommended to all persons interested in public health work.

* * *

Friend of the People by Chalmers G. Davidson, Ph.D., Professor at Davidson College. Pp. 151. Columbia, The Medical Association of South Carolina, 1950. Price: \$2.75.

This is the story of the life of Dr. Peter Fayssoux, Charleston, South Carolina, the first president of the

Medical Association of South Carolina. Dr. Fayssoux was typical of his generation in many facets of his interests—a Revolutionary patriot, an outstanding “practitioner of physic,” a leader in local statecraft and a Charleston personality of singular appeal. During the Revolution he was Surgeon-General and Chief Physician for the Southern hospital. He was also a leader of the Anti-Federalists—the “States-righters” of their day. Anyone interested in medical history will enjoy this book.

* * *

Cerebral Palsy by John F. Pohl, M.D., Orthopedic Surgeon, Michael Dowling School for Crippled Children, Minneapolis, Minnesota; Diplomate, American Board of Orthopedic Surgery; Member, American Academy of Orthopedic Surgeons; Associate Member, American Academy for Cerebral Palsy. 224 pages with 131 illustrations. Saint Paul, Bruce Publishing Company, 1950. Price: \$5.00.

This text explains the diagnosis and treatment of cerebral palsy with specific and special therapeutic technics concisely described. Numerous illustrations supplement the descriptive chapters and vividly demonstrate each step to be taken in the treatment of all types of cerebral palsy. Emphasis is placed on neuromuscular training. The technics presented in this book have been proved successful during twelve years of research and clinical study by Dr. Pohl. Recommended to medical practitioners, therapists, and parents of children with cerebral palsy.

* * *

On Hospitals, by S. S. Goldwater, M.D., Formerly Superintendent and Director, the Mount Sinai Hospital, New York; Commissioner of Health of the City of New York; Consultant in Hospital Organization and Planning; Commissioner of Hospitals of the City of New York. 384 pages, 6½ x 9½ inches, illustrated. New York, The Macmillan Company, 1947. Price: \$9.00.

This book contains a group of more than fifty articles carefully selected from the voluminous writings of a man whose life was devoted to public health, hospital administration, and hospital planning. These articles, culled from the many previously published papers and addresses and much unpublished material left by Dr. Goldwater, were compiled and edited by Mrs. Goldwater and experts in the field. Dr. Goldwater was so far in advance of his time that the practices which he advocated are just now beginning to come into wide use. This book is the outcome of his carefully thought-out philosophy and his wide practical experience. Presented in Dr. Goldwater's clearly reasoned style, it offers the most authoritative information available on the planning and administration of hospitals. It is pleasant to read, easy to understand. It is a definite addition to medical literature. Recommended for all who work in hospitals.

* * *

Up From the Ape, by Ernest Albert Hooton, Professor of Anthropology at Harvard University and Curator of Somatology at the Peabody Museum. 769 pages, 6½ x 9½ inches, containing 39 full-page half-tone plates, 6 photomicrographs, 68 text drawings. Revised edition. New York, The Macmillan Company, 1947. Price: \$7.00.

A completely new edition of the famous classic on man's evolution from the dawn of time to the present day which incorporates masses of new facts discovered since the first edition of this delightful classic in 1931. In the six parts of this book, man is viewed from all possible sides. First there is the question to whom he is related in the animal kingdom; why he is a mammal and a primate; and if this reasoning does not convince you, there is the newest proof—blood tells! Immensely interesting and informative. Don't miss it.

The Management of Obstetric Difficulties by Paul Titus, M. D., Obstetrician and Gynecologist to the St. Margaret Memorial Hospital, Pittsburgh; Consulting Obstetrician and Gynecologist to the Shadyside Hospital, Pittsburgh; Secretary of the American Board of Obstetrics and Gynecology; Member Reserve Consultants Advisory Board, Bureau of Medicine and Surgery, United States Navy (Captain, MC, USNR). 1046 pages, 7 x 10 inches, 446 illustrations and 9 color plates. Fourth edition. St. Louis, The C. V. Mosby Company, 1950. Price: \$14.00.

This latest edition of Dr. Titus' book incorporates the changes made in obstetric practice in the post-war period since the publication of the third edition in 1945. He states that drugs, especially penicillin, used exclusively by the armed forces in World War II have come into use in private practice in the last few years and have greatly lowered the maternity mortality. This and other changes are ably presented. One of the finest features of this text are the beautiful illustrations, numbering nearly a half-thousand, which appear in every chapter. A “must” for every obstetrician and gynecologist.

* * *

Doctor Come Quickly, by Frank J. Clancy, M.D., a practicing physician in Seattle, Washington. 248 pages, 6 x 8½ inches. Seattle, Superior Publishing Company, 1950. Price: \$2.95.

An autobiography of a physician whose practice brings him into contact with people in a relationship which is at once intimate and detached. He prefers to look on a doctor as a person dealing with people, rather than as a remote “M.D.” dealing with “cases”. The emphasis in this book is on his practice; i.e. his patients. The book teems with reminiscences: of bathtub gin and stomach pumps, girls who followed the fleet and then passed blithely through the VD clinic, patients more interested in laxatives than life, etc. The author states: “My object has been to present a real-life doctor to the reader, not a medicine man who performs staggering deeds with long magnetic fingers and a bowl of hot water.” Recommended to all tired doctors who need a tonic to pep them up. Thoroughly enjoyable.

* * *

“Let's Name the Baby.” A new booklet of particular interest to doctors and parents-to-be has just been published under the title, “Let's Name the Baby.” It includes over 750 first names of boys and girls giving the original meaning of each name, the language from which the name is derived, etc. The booklet also includes horoscopes based on the signs of the Zodiac covering birth dates throughout the year and an interesting foreword which tells how our first names evolved over the years. Another feature lists the birthstones of the various months.

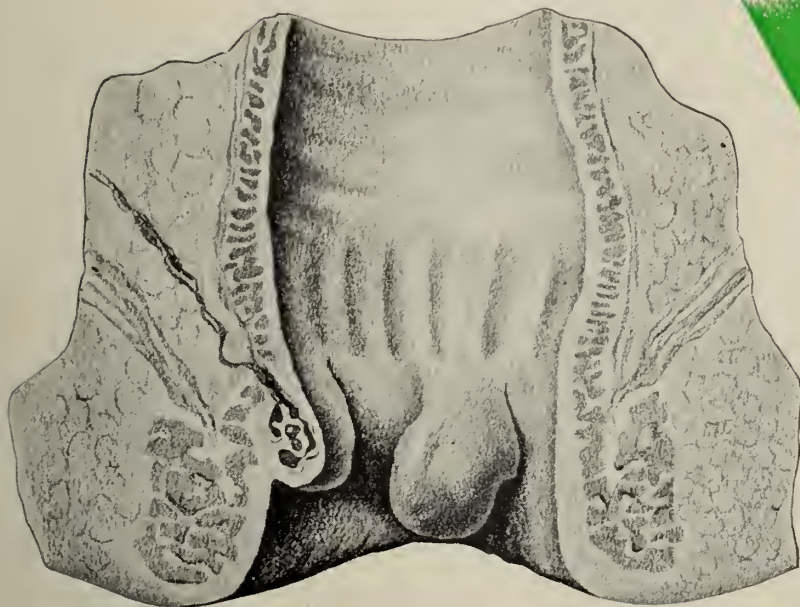
The 32-page booklet with humorous illustrations is offered to doctors at low prices in quantity lots—as low as 9 cents each in lots of 1,000, and 12½ cents each in lots of 100. It is being distributed to patients by many obstetricians and pediatricians. Individual copies are priced at 25 cents each and are obtainable from Juvenile Merchandising, 114 East 32nd Street, New York 16, N. Y.

* * *

Immortal Magyar, by Frank G. Slaughter, M.D., one of the country's most popular writers of medical fiction. 211 pages, 5½ by 8½ inches, illustrated. New York, Henry Schuman, Inc., 1950. Price: \$3.50.

A straight-forward, unromanticized narrative biography of one of the greatest and most tragic medical figures, Ignaz Philipp Semmelweis, who conquered childbed fever. Semmelweis was a Hungarian physician whose unique contribution to medical science was never fully recognized in his lifetime. He started his

(Continued on Page XVI)



Bowel Regulation in Hemorrhoidal Conditions

When there is a tendency toward hemorrhoids, when hemorrhoids are present or after hemorrhoidectomy—when avoidance of straining is desired—Metamucil's smooth, demulcent action conforms to accepted bowel management.

Metamucil softens the fecal content, stimulates peristalsis by supplying plastic, bland bulk and encourages easy, gentle, regular evacuation without irritation or straining.

Metamucil is the highly refined mucilloid of *Plantago ovata* (50%), a seed of the psyllium group, combined with dextrose (50%) as a dispersing agent.

G. D. Searle & Co., Chicago 80, Illinois.

SEARLE RESEARCH IN THE SERVICE OF MEDICINE



METAMUCIL®

Please mention this Journal when writing advertisers.

(Continued from Page 434)

fight against puerperal fever in Vienna but was driven out by political and personal persecution. He then continued his life-saving task in Hungarian hospitals, only to meet with more opposition. Embittered and angry, he continued his lonely struggle until his death at the early age of forty-seven. This is an inspiring story, told with warmth and insight by one of the country's favorite authors, of a man who launched a new era in obstetrics, and of his great life-saving discovery.

WANTED—Roentgenologist for mental hospital. Attractive salary and partial maintenance. Two excellent colleges in immediate vicinity. Submit full information, three references and small photograph in first letter. Address Superintendent, Box 325, Milledgeville, Ga.

WANTED — Skeleton suspended in the usual type of cabinet. Please send details and statement of condition to G. M. Hutto, M.D., 204 Medical Arts Bldg., Columbus, Ga.

FOR RENT OR LEASE: Modern building, equipped as 10-bed hospital for surgical, obstetrical and general practice. Also may be used as offices. Located in South Georgia. For full information, write Medical Placement and Mailing Service, 768 Juniper St., N.E., Atlanta, Ga.

FOREMOST FRESH MILK HAS...



FOREMOST DAIRIES

Main Office:
Jacksonville, Florida



HILL CREST SANITARIUM

FOR NERVOUS AND MENTAL DISEASES AND ADDICTIONS

Insulin and Electro-Shock Therapy Used in Selected Cases. Gradual Reduction Method Used in the Treatment of the Addictions

Thoroughly modern in architecture and construction. Eight departments—affording proper classification of patients. All outside rooms attractively furnished. Several bathrooms and rooms with private bath on each floor. Also a spacious sun parlor in each department. Located on the crest of Higdon Hill, 1,050 feet above sea level, overlooking the city, and surrounded by an expanse of beautiful woodland. Ample provision made for diversion and helpful occupation. Adequate night and day nursing service maintained. Catalogue sent on request.

James A. Becton, M.D., Physician-in-Charge
P. O. Box 2896, Woodlawn Station, Birmingham, Alabama

James Keene Ward, M.D., Associate Physician
Phones 9-1151 and 9-1152

THE JOURNAL OF THE MEDICAL ASSOCIATION OF GEORGIA

PUBLISHED MONTHLY under direction of the Council

Vol. XXXIX

Atlanta, Georgia, November, 1950

No. 11

MANAGEMENT OF TRAUMATIC RUPTURE AND STRICTURE OF THE MEMBRANOUS URETHRA COMPLICATING FRACTURE OF THE PELVIS

JAMES H. SEMANS, M.D.

Atlanta

In a series of 780 patients with fractures of the bony pelvis, 99 or 12.6 per cent, were complicated by rupture of the membranous urethra. This series was collected in a highly industrialized community, where such accidents are not rare.¹

Diagnosis. The diagnosis of rupture of the membranous urethra is considered as soon as blood is seen at the external urinary meatus. Rectal examination frequently demonstrates an absence of the normal contours of the prostate. This is usually produced by bleeding around the urethra. The resulting hematoma masks the prostate. Not infrequently the prostate has been rotated anteriorly, because of complete separation from its attachment to the membranous urethra. Traction on the apex of the prostate by the remaining intact structures moves this portion of the gland anteriorly and proximally, away from the examiner's rectal finger.

It is occasionally necessary to inject radiopaque material into the urethra to confirm the diagnosis. If this is done, a 10 per cent solution of diodrast, skiodan or neoipax should be used. These solutions produce no painful necrosis of tissue. Being readily absorbed, they do not remain as

a foreign body. Sodium iodide, although opaque to x-ray, is extremely irritating to tissue and painful, when it has extravasated through the point of rupture in the urethra. The oily solutions are less desirable because of their permanence.

The possibility of rupture of the urinary bladder, complicating fracture of the bony pelvis, must also be considered. This is outside the scope of the present discussion.

Treatment. Because the patient is frequently in shock, elevation of the foot of the bed, blood transfusions and sedation are of immediate necessity. Meanwhile, the patient is cautioned not to void, if he has not already done so. Extravasation of urine through the point of rupture irritates the periurethral tissue. Next in order is suprapubic cystotomy.

Early repair of the ruptured urethra is desirable. This can often be accomplished through the perineum, after cystotomy, as part of the same surgical procedure. If the patient's condition contraindicates perineal surgery at the same sitting, the periurethral space can be drained from above, through a stab wound in each lower abdominal quadrant. This provides a path of exit for blood surrounding the urethra, a site of potential infection. Perineal repair at this time avoids the disadvantage of dense scar tissue and bony fixation of the narrow pelvic arch, often encountered later.

The usual perineal inverted U incision is made. With a sound in the urethra, the operator's finger is guided to the site of rupture in the midline of the incision, anterior to the rectum and on the inner surface of the transversus perinei muscle. If the

Read before the Medical Association of Georgia in annual session, Macon, April 20, 1950.



Fig. 1. Cystourethrogram showing upward displacement of the urinary bladder and lengthy stricture of the membranous urethra, before operation. Note extravasated oily radiopaque medium, still evident two years after injection.

apex of the prostate has been rotated upward, a sound passed through the cystotomy and prostatic urethra makes the gland accessible in the perineal incision. The apex of the prostate can then be grasped with forceps and sutured to the urogenital diaphragm. A self-retaining balloon catheter, passed into the urethra and guided through the prostate into the bladder, acts as a splint. Four radial sutures of chromic 1 catgut makes the anastomosis secure. A Penrose drain, left in the perineal incision for several days, provides adequate dependent drainage for the suture line. The catheter should be left in place for at least 2 weeks.

Antibiotics should next be administered. If the patient is able to take medication by mouth, chloromycetin in dosage of 500 mg. every 8 hours provides prophylaxis against infection. For those patients who cannot take medication orally, 300,000 units of crysticillin and 1.0 Gm. of streptomycin daily for 3 days, accomplish the same purpose. Risk of toxicity is minimal during this brief interval.

Management of a dense stricture, many months after injury, is much more difficult. Painful urethral dilatation, infected residual urine in the bladder and eventual renal

damage are indications for excision of the stricture. The scar tissue can be totally or subtotally removed, and the prostate anastomosed to the external urinary sphincter. If the pubic bones have not too much deformity after the fracture has healed, this procedure can be carried out through the perineum. However, as described below, a transpubic route may be the surgeon's only choice.

CASE REPORT

Neither a perineal nor retropubic approach provided sufficient exposure to remove the stricture in a patient who has recently been treated. A 39 year old colored man was pressed against a stone wall by a truck on Feb. 16, 1948. Emergency x-rays showed fracture of both the superior and inferior pubic rami on both sides. Another fracture line extended vertically throughout the entire left wing of the sacrum. Injection through the penis of an oily radiopaque medium demonstrated marked extravasation in the region of the membranous urethra (fig. 1).

Suprapubic cystotomy was carried out within 24 hours. Management of the ruptured urethra was conservative, consisting of urethral dilatation at regular intervals. The patient had continual, marked difficulty in voiding, except for periods of 5 to 7 days after dilatation.

Surgical Procedures. Dr. Lawson Thornton immobilized the sacroiliac joints with a bone graft on Dec. 3, 1948. This was successful in correcting orthopedic complaints resulting from instability in the region of the fractured sacroiliac joint.

On May 31, 1948, an attempt at repair of the stricture of the membranous urethra through a perineal incision was made by me. The indications for operation were recurrent chills and fever and persistent infected residual urine. Narrowness of the pubic arch, produced by bony fixation of the fragments of the pubic rami, was so marked that satisfactory exposure of the area of stricture could not be accomplished.

The cystourethrogram (fig. 1) made before this operation shows the upward displacement of the bladder, and length of the stricture. The same shadows of extravasated oily radiopaque medium are clearly illustrated in x-rays made 2 years after the accident.

Since the patient continued to carry infected residual urine in amounts of 75 to 250 cc. and had recurrent chills and fever, it was decided that some means must be provided for removing the stricture. Since the perineal route had not been feasible, and the retropubic space too narrow for satisfactory exposure, a transpubic approach was used.

Dr. Phillip Warner removed the symphysis pubis and sufficient bony fragments on either side to provide satisfactory exposure of the stricture. After this was accomplished on March 15, 1950, it was possible to excise, under direct vision, 9 Gm. of scar tissue between the urogenital diaphragm and prostate. Care was taken not to injure the anterior wall of the rectum, by confining the excision to the anterior and lateral walls of the strictured urethra. The floor of the area was not disturbed. The apex of the prostate was freed of scar tissue, until it was pliable and could be mobilized to meet the urogenital diaphragm.

A finger in the rectum identified the site of the external urinary sphincter. It was considered preferable to leave a few millimeters of strictured urethra in this area, in order to avoid the risk of damaging the external urinary sphincter and producing incontinence.

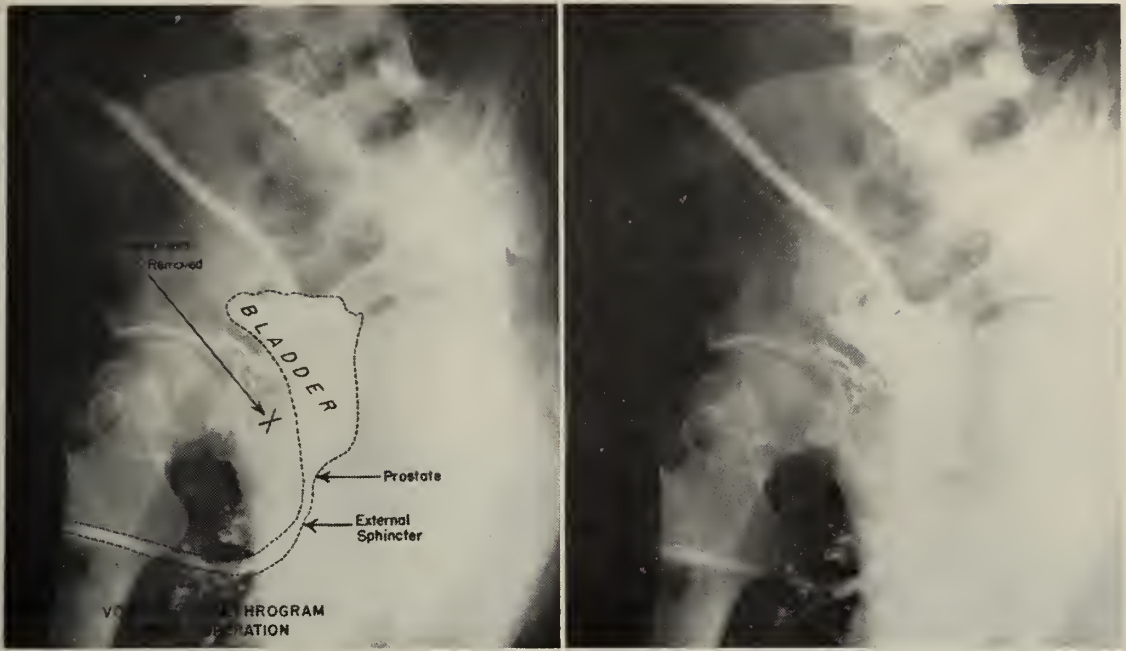


Fig. 2. Voiding cystourethrogram, showing the bladder and prostate fixed to the urogenital diaphragm, after excision of the strictured membranous urethra.

Four sutures of chromic 1 catgut were used to anastomose the apex of the prostate to the urogenital diaphragm around a balloon type of soft rubber catheter. This was left in place as a splint for a period of 3 weeks. The old cystotomy was re-established and maintained for a period of 1 month.

The postoperative x-ray (fig. 2), made while the patient was voiding a radiopaque fluid, shows the new location of the prostate and bladder near the urogenital diaphragm. The strictured area, seen in the previous illustration, was much shorter. There was no residual urine after this voiding. Dilatation, although at greater intervals, had to be continued. After four and one-half months the residual urine was 90 cc. Before operation it was 200 cc. The patient's pubic arch has proved stable enough to enable him to walk after operation.

Millin² reports a similar patient, successfully operated upon by Stobbaerts 5 years ago. This patient was a miner, who was able to return to work after excision of the symphysis and urethral stricture. Postoperative photographs are convincing evidence of the preservation of good muscular function after removal of the symphysis.

Discussion and Summary

Repair of rupture of the membranous urethra within the first few days after trauma is strongly recommended. If the pubic arch has not been excessively narrowed by the displaced bony fragments, either the perineal or retropubic approach is satis-

factory. The advantage of dependent perineal drainage is apparent.

However, if these routes are not feasible, a transpubic approach should be considered. The assistance of an orthopedic surgeon is valuable in providing immobilization of the pelvic arch when indicated, and also for removal of the symphysis pubis without risk of damage to the urogenital diaphragm and external urinary sphincter.

The indications for repair of long standing stricture of the membranous urethra are: (1) infected residual urine and (2) necessity for continued dilatation of the strictured area for the remaining years of the patient's life.

REFERENCES

1. McCague, E. J., and Semans, J. H.: The Management of Traumatic Rupture of the Urethra and Bladder Complicating Fracture of the Pelvis, *J. Urol.* 52:36, 1944.
2. Millin, T.: *Retropubic Urinary Surgery*, Baltimore, Williams & Wilkins Company, 1947.

HEALTHGRAM

The final diagnosis in pulmonary tuberculosis rests upon the demonstration of the tubercle bacillus just as that of carcinoma of the lungs depends upon histologic proof. A reasonable certainty of predicted diagnosis can be obtained in about four-fifths of the cases with only the usual x-ray examination such as posteroanterior, oblique or lateral films. Merrill C. Sosman, M.D., *New England J. Med.*, June 1, 1950.

HORIZONS OF MODERN PLASTIC SURGERY

JOHN R. LEWIS, JR., M.D.
Atlanta

The origin of plastic surgery dates back to 4000 B.C. Since that time there have been only two periods of rapid advancement of this specialty, once about 100 A.D. in the day of Celsus and Galen, and again during the 20th century when given an impetus by two world wars.

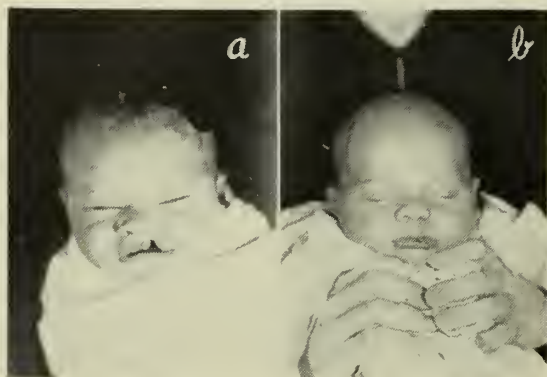


Fig. 1. (a) Newborn baby with harelip deformity. (b) Three weeks after repair of lip. Repair is carried out under local anesthesia within the first few days of life.

In view of its recent modern history plastic surgery has made rapid progress and has become a full fledged branch of the tree of modern surgery. However, its future horizons beckon and give hint of further progress.

One of the most essential of the plastic surgical procedures is the correction of a harelip. This procedure may be carried out safely and simply during the first few days of life and is usually performed under local anesthesia. The technic which I prefer brings the scar to the midline at the red border so as to leave a symmetrical lip, and one which leaves the least possible evidence of the previous defect to embarrass the patient (fig. 1). This surgery should be car-

ried out at the earliest possible moment, not only because the baby responds well, but because it lessens the heartache and embarrassment of the parents.

Another prominent congenital deformity is ptosis of the eyelids. It may lead to disuse atrophy of the affected eye if neglected. Correction is carried out by implanting a fascia lata strip in the eyelid and attaching it to the occipitofrontalis muscle behind the eyebrow (fig. 2).



Fig. 2. (a) Congenital ptosis of upper eyelid. Loss of vision may result from disuse atrophy of the eye. (b) Six weeks after correction by plastic surgery.

"Birthmarks" of other types are quite frequent also and correction at the earliest possible date is strongly advised. Dark hairy moles can be quite deforming and should be fully excised. If small these may be closed primarily, but a larger lesion must be replaced by a skin graft. Neglected lesions should of course be removed at any time during life and many of these larger lesions may be excised with closure if the operation is performed in stages.

Hemangiomas are frequently seen at birth. The usual strawberry mark may regress rapidly after birth and may need no treatment. However, many of these lesions remain and may even become extensive. The smaller raised lesions may be injected with sclerosing agents with some success. However, large lesions usually do not fully respond to injection and come to surgical excision (fig. 3).

One of the most common operations per-

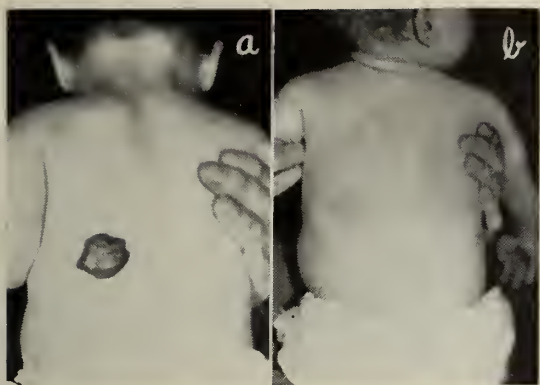


Fig. 3. (a) Large raised hemangioma of back. (b) Four weeks postoperatively. Large lesions such as this must be excised.



Fig. 4. (a) Hump nose deformity of nose. (b) Six weeks after correction by plastic surgery under local anesthesia.

formed by the plastic surgeon is rhinoplasty. This operation is performed oftentimes because of the hump nose. The hump is removed and the nose is shortened and narrowed in order to achieve a more pleasant appearance (fig. 4). Frequently the appearance of the whole face is changed by correcting the appearance of the most prominent member, the nose. This operation is certainly not to be considered strictly cosmetic as one is forced to admit after noting the response of the personality and the change in the general outlook of the patient following an operation of this type. Many operations on the nose are necessary because of trauma to the nose. The nose may be deflected to one side or the other giving the face an unpleasant appearance as well as interfering to a great degree with breathing through the nose. Surgery may be per-

formed under local anesthesia to correct not only the breathing difficulty but also the appearance of the nose, with only the loss of one or two weeks from work. Local anesthesia is used and postoperative pain is practically nil.

The so-called saddle nose or flat nose deformity may result from nasal operations performed to relieve breathing difficulty and as a result of trauma. Correction can be carried out on these cases by inserting a cartilage transplant either from the patients own rib or using preserved cartilage (fig. 5).



Fig. 5. (a) Saddle nose deformity of nose. This commonly results from neglected injuries of the nose. (b) The nose has been corrected by a cartilage graft to the bridge under local anesthesia.

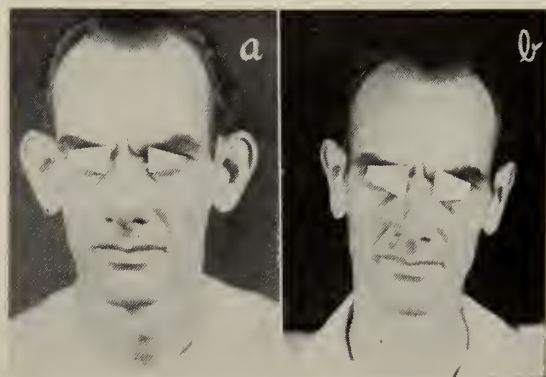


Fig. 6. (a) Prominent protruding ears may cause severe psychologic complexes, in children as well as adults. (b) Correction has been carried out under local anesthesia.

Prominent ears are a great source of embarrassment and a feeling of great inferiority to both children and adults (fig. 6). Even little boys only 4 or 5 years old feel their inferiority because of the teasing of playmates who call them Jumbo and Ele-

phant ears and other taunting names. These can be corrected very easily under local anesthesia leaving a small scar well hidden behind the ear. Ears in children can be corrected at the early age of 5 to 7 years because the ears grow very little after that age. In cases of avulsion of the ears as well as congenital deformities it is oftentimes necessary to reconstruct the external ear.

One of the most common and most disheartening facial disfigurements is the scarring caused by acne and smallpox. These acne pits and pock marks have been borne with little hope of relief and with a feeling of selfconsciousness and a severe inferiority complex in most cases. During the past three years I have had experience with a new method of treating these deforming scars. It consists of abrading the skin under local anesthesia, followed by a fine mesh gauze dressing for about one week. During this week the epithelium regenerates and the resulting skin is much smoother and more even (fig. 7). A similar method is very effective in cases of traumatic tattoos in which grit and cinders have been ground into the skin or bits of oil or foreign material have been blown into the skin in explosions. By abrading the facial skin in stages this material is quickly removed. Actual surgical tattoos are best removed by removing the outer layers of the skin with a dermatome.

Prognathism, or a very prominent lower jaw and jutting chin is not an unusual developmental deformity. There have been several operations designed to correct this deformity, but the most effective operation in my opinion is the resection of a segment of the body of the mandible on each side. This results in a less prominent chin and the teeth fall into satisfactory occlusion.

Automobile accidents lead by far all other causes of injury to the face. The guest passenger, the passenger riding beside the driver in the front seat, is injured about four



Fig. 7. (a) Severe scars of the face caused by acne and by chickenpox. These are a severe handicap. (b) After smoothing of the skin under local anesthesia in three stages.

times as often as anyone else in the car. These injuries should be properly evaluated as soon as possible. All fractures of the facial bones should be ascertained and reduced and all lacerations be meticulously debrided, thoroughly cleansed and carefully closed at the time of the accident. A crash pad is of value in lessening injuries sustained on the instrument panel.

Burn scars present a difficult problem. Many times the resulting scars are very contracted and allow very little stretch. The scar if firm and keloidal should be excised and replaced by a thick split-thickness skin graft. Often Z-plastic procedures may be performed in order to allow the proper amount of mobility of the part. This is particularly useful across flexion creases. In severe burns of the chest wall the breasts may be bound down and large skin grafts must be applied underneath each breast in order to free up the breasts and make the patient more comfortable.

Skin involved by x-ray burns are potential areas of malignancy for x-ray irradiation has a progressive affect. These areas should be excised and replaced by thick dermatome skin grafts. If the color does not appear satisfactory a pink pigment may be injected into the graft by tattooing in order to give a more pleasant appearance.

Lesions of the nose resulting in large defects of the nose may be repaired from

flaps from the face or, if large, from tube flaps from the neck. The neck skin gives a good color match with the facial skin. Lesions of the eyelids may be excised and replaced by full thickness grafts from behind the ears with a good functional and cosmetic result. Ulcerations in old burn scars should be strongly suspected of malignancy. Wide excision with skin grafting should be carried out. These lesions usually prove to be squamous cell carcinoma.

Plastic surgery of the breast is carried out not only for cosmetic purposes but for purposes of comfort. Large pendulous breasts are uncomfortable and pendulosity in many cases may lead to chronic mastitis due to the deficient drainage and venous return from the pendulous breasts. Surgery consists of reshaping the breasts and shifting the nipples to a higher position. The nipples retain their normal response to stimulation and the normal sensation. Such patients are much more comfortable following surgery.

On the other hand surgery for hypoplastic breasts is carried out simply for purposes of appearance and the attendant psychologic complexes. The breasts may be built up either with fat grafts or possibly with a new plastic, polyethylene. The grafted material is applied against the chest wall and beneath all the fat and breast tissue which is present so that any lesion occurring in the breast would be easily palpable outside this material. These patients recover rapidly following surgery.

Enlargements of the breast in the male are embarrassing. In cases of gynecomastia the patient develops a severe feeling of self consciousness. The excessive breast and fatty tissue is removed through an intra-areolar incision with little or no scar resulting.

In conclusion I would like to repeat that refinements in the technics which were worked out by the masters of the past and

have been improved with each succeeding decade have carried this field into a more honored place among the medical specialties. Plastic surgery has a twofold purpose: improvement in appearance and improvement in function. I think that no one would deny that improvement in appearance and in function accomplishes a great improvement in the psychologic outlook of the patient and better prepares him for his social contacts and business dealings, as well as more nearly insures his personal happiness which, after all, is most important of all.

THE TREATMENT OF FRACTURES OF THE MIDDLE THIRD OF THE FACE

FRANK F. KANTHAK, M.D.

Atlanta

Fractures of the bones comprising the middle third of the face present unusual problems in treatment as compared with those fractures of the lower third of the face. This is so in part because of the close anatomic and physiologic association of the bony structures of the middle of the face with the orbit, the base of the brain, the paranasal sinuses and the cribriform plate. In addition, the bones forming this portion of the facial skeleton are largely thin "egg-shell" type structures which do not lend themselves to customary methods of reduction and fixation as may be utilized on other osseous structures.

These injuries are frequently associated with severe injury to the patient in so far as his sensorium is concerned. They are frequently associated with more or less mental confusion and actual brain damage. For these reasons, the patient may not receive early adequate care in the replacement of these fractures. Since these bones have a tendency to heal rather rapidly, they may heal in mal-position with conspicuous de-

formities which are very difficult to correct at a later date. If the patient is seen early it is possible to reduce these fractures more often than not, with relatively little inconvenience to the patient and with comparatively little danger. Actually, because of the intimate relationships between these fractures and the base of the brain, symptoms such as cerebrospinal leakage may stop promptly after reduction of these fractures because of the extrusion of spicules of bone which have penetrated the dura. These factors in addition to the antibiotics, enable us to reduce and treat these injuries earlier with greater safety than was previously considered possible. The anesthesia of choice here is endotracheal anesthesia; but, if conditions warrant, the patient may be anesthetized with deep block anesthesia and local infiltration anesthesia, and the operation proceeded with. I will discuss the treatment of fractures of the maxilla a little more completely later on.

In conjunction with fractures one frequently sees rather extensive lacerations and some soft tissue loss. Here the patient is handled in the same way after he is stabilized and is considered a satisfactory risk for anesthesia. Under endotracheal anesthesia the wound is debrided, the soft tissues are debrided, and loose fragments of bone are removed, the intraoral apparatus is installed to treat the fractures of the jaws, because our objectives are to restore the occlusion of the teeth as well as to restore the patient's face to its former symmetry.

In a consecutive series of 26 cases of fracture of the zygomatic bone these were the symptoms that I noted: All of them had swelling of the face, as you might expect, because of the injury that they had encountered. In addition, after the swelling had subsided, a large number of them had depressions of the face. A number of them had trismus or inability to open the mouth widely, or pain in the jaw. If you will re-

member the anatomic arrangement, the coronoid process of the mandible lies underneath the zygomatic arch, so that as a depressed fracture of the zygomatic bone ensues it presses on the coronoid process of the mandible. This prevents the mouth from being opened. Ecchymosis is readily understandable, and anesthesia of the infraorbital area occurs because of the location of the infraorbital nerve in connection with the zygomatic bone, where it is readily traumatized by the fracture occurring in that portion of the face. This anesthesia is temporary.

A small number of these patients had diplopia, due to a change in the tension of the extraocular muscles when the optic globe was lowered by the depressed fracture of the zygomatic bone which forms the floor and lateral wall of the orbit.

One of the patients had emphysema, because the zygomatic bone forms the outer wall of the antrum, so in a depressed fracture of the zygomatic bone it is inevitably depressed into the maxillary sinus and there is some rupture of the mucosa and the antrum is filled with blood.

The treatment of these fractures is relatively simple. There have been many methods proposed. All of them are effective, and the choice of which method one uses depends on one's personal preference, with one exception and this is that if the fracture of the zygomatic bone is comminuted and broken into small pieces into the maxillary sinus, one is wise in doing a Caldwell-Luc type operation and cleaning out the fragments of bone and the frayed tissue that ensues from that type of injury, otherwise the elevation of the fracture may be accomplished by any of the means indicated here.

If one reduces these fractures relatively soon after injury the serrated edges of the bone are sufficiently sharp so that it will retain its position by friction. If one waits for ten days or more, reduction is frequently

difficult because fibrous healing occurs which sometimes makes it impossible to elevate the bone; secondly, if the bone is elevated, it promptly falls back to its previous position because it has nothing to hold it in the original position. It is necessary to supply some form of external support to the bone to do that.

Skull cap traction has been used in the past a great deal to treat fractures of the maxilla as well as fractures of the zygomatic bone or of the nose, and I have yet to see a patient who has been comfortable in one.

Fractures of the maxilla can be diagnosed, in the absence of x-rays and other things, by the change in the occlusion of the teeth and by grasping the maxilla and seeing if it can be moved.

Instead of treating this with a head cap, direct wiring of the bone through the zygomatic process of the frontal bone is done, passing a stainless steel wire under the zygomatic arches, underneath the skin, and bringing the wires out into the muco-buccal fold. There they are wired to an arch bar which supports the fractured maxilla against the cranial vault. In this way all the apparatus is retained inside the face.

In conclusion, these fractures bring up unusual problems because of their anatomic location. The reduction of these fractures should be attempted as early as considered consistent with the patient's well being. They have a tendency to heal rather rapidly and to fix in position, and they are extremely difficult to correct after fixation has occurred. They can be reduced under local anesthetic if necessary, with endotracheal anesthesia being the method of choice, and direct wiring of the bone, such as illustrated in the last case provides a method of fixing the maxillary fractures, which enables the patient to go through the period of healing without the encumbrance of a skull cap which is uncomfortable to him.

EARLY SIGNS AND SYMPTOMS OF BRAIN TUMORS

CHARLES E. DOWMAN, M.D.

Atlanta

In medical school days my Professor of Obstetrics referred us to a text which listed the signs of pregnancy in three categories: presumptive, probable and positive. If we are to be of help in progressive diseases, particularly in neoplasms, we must pay more attention to the patient's early complaints, with a fairly high index of suspicion, else we will be able to do little for them. The only cure we know for cancer, or any other tumor, is to get it out with a wide margin of normal tissue.

Recently, a fellow physician told me by phone that his patient, referred to me by an eye doctor, couldn't have a brain tumor. When I inquired why he felt that way, he said it was true that she had had convulsions for eight years and headache and recently blindness, but that she had had no diplopia and no vomiting. Gentlemen, this doctor was sincere, honest, conscientious, and trying to do the best for his patients. If he has been allowed to carry the concept that the diagnosis of brain tumor requires all of these symptoms, then that is the fault of those of us who do such work and have not taken to him more accurate graduate education. Hence this talk, directed mainly to the man who sees these people early. It is obviously impossible for a neurosurgeon to see every patient. Therefore, we must let you know when to be suspicious of brain tumor. As in pregnancy, the earliest signs and symptoms are the presumptive ones.

Convulsions

Very small tumors, strategically located, make their presence known early by con-

vulsions. Certainly, anyone who has his first convulsion after the age of 20 years, deserves very careful neurologic and neurosurgical investigation. Dr. Hughlings Jackson of England, almost a century ago, described the type of convulsion which begins in one part of the body, then spreads to involve other parts. Having observed these patients before and after death, he gave us our first theories of cortical localization. These theories were later supported by the results of stimulation from an induction coil after this had been invented, carried out by Frisch and Hitzig about 1885. Actually, the problem of localization in the brain is better understood if one remembers the position of the image on the back of a ground glass camera. Since the main portion of the brain was developed along with the use of an eye with a lens system, this superstructure is arranged backwards and upside down. Thus the leg centers lie high on the brain and the face centers low, with the arm center in between. The right side of the brain controls the left side of the body and vice versa. Thus tumors close to the midline may produce convulsions starting in the leg while those in the temporal lobes and low frontal lobes, usually start in the face.

The most alarming attacks are the cataplectic ones with sudden loss of consciousness without warning which occur after a larger tumor has begun to squeeze the brain stem. Here life itself is at stake and unless pressure is released, death will result.

Unfortunately, rarely does the physician observe a convulsion. Therefore, we are usually dependent on the observation of the patient and of his family. It is much more difficult to reconstruct what happened at the time of a convulsion from asking others than to observe one, but frequently, careful questioning as to the positioning of the head, eyes, arms and legs after one attack will give

more adequate information after the next one.

Generalized convulsions may occur from tumor and are more apt to do so with so-called "silent area" localization, particularly temporal and frontal. Subfrontal tumors may have attacks preceded by uncinate warnings. This usually consists of a bad odor and the odor is usually a familiar one.

Temporal lobe tumors may produce only somnolence. It is not without reason that the Germans call this the *Schlafenlappen* or sleep lobe.

Occipital tumor attacks may begin with formed visual hallucinations or the patient may show a fairly sweeping visual field loss and be unaware of it until he runs into a door jamb, or is surprised to see a car which has come from his "blind side" right in front of him.

Focal sensory attacks occur in parietal lobe tumors, either a strange, crampy sensation or a focal numbness. On the dominant side of the brain, one may see temporary aphasias which may be in the naming sphere (the so-called nominal aphasias), in the motor or actual speech center, or in the association center for vision or hearing.

Of course all of these paroxysmal handicaps can be completely and continually present once a center has been invaded instead of irritated, so it is usually better that one find and treat such cases in the phase of irritation rather than in the phase of paralysis.

Headache

Unfortunately all early tumors do not show themselves with such insistent symptoms as convulsions. For the others we must wait for the tumor to show itself in some other way. Headache is one fairly regular presumptive symptom of tumor. Usually, there is little help to be gained from the location of the headache, but stiff neck and suboccipital headache do occur with cere-

bellar and foramen magnum tumors. In colloid cysts of the third ventricle and some of the tumors which intermittently block the flow of the spinal fluid, we see headaches that come on abruptly, frequently when the patient is lying down, and disappear when the patient stands or leans forward. The ordinary increased pressure headache is worse in the early morning, better after being up and about, and may be accompanied by vomiting but does not have to be. The headache may be steady or throbbing. Frequently, it is described as "all over". Bifrontal location occurs particularly in frontal tumors. The headache of brain tumor is frequently progressively worse as time goes on. Any patient with headache which requires narcotics stronger than codeine for relief certainly merits neurosurgical study.

Cranial nerve complaints also suggest a presumptive tumor diagnosis. Loss of smell, partial visual field loss, double vision, protrusion of one eye, facial pain or numbness, hearing handicaps, vertigo, difficulty in talking or swallowing all give indication from the history for one to investigate the problem further.

Vomiting does occur as a late sign of brain tumor, and associated with headache or double vision or both may be considered as essentially a positive sign. It is this stage that we hope our patient will not reach before we see him. When any third year medical student can arrive at a diagnosis of brain tumor, the outlook for cure in such a case is less than when the first symptom develops.

Signs

Now let us go into the more important signs of brain tumors. Masses on the skull are frequently a fairly positive sign and yet they may be felt on the head for years before convulsions occur in superficially placed meningiomas. A unilateral non-pulsating exophthalmos is a frequent sign of involvement of one wall of the orbit or of the soft tissues in the orbit by a friendly

tumor. One meningioma I saw was biopsied from within the mouth, having produced a deep temporal mass.

An ophthalmoscope is a very important gadget to be able to use in all fields of medicine. In increased intracranial pressure, where the veins are distended, the disc margins blurred, the optic cup filled, then frank disc elevation, hemorrhages and exudates, this instrument is of tremendous value. The only way that one can become proficient with it is to use it daily, looking into many normal eyes in order to know the normal so well that pathologic findings become very striking by comparison.

Fields of vision can be done rapidly and readily by confrontation methods with the patient looking into the examiner's eye, the hand or finger being well out in the temporal and nasal fields of vision, and the patient stating whether the hand or finger is moving or still. Inasmuch as the visual pathways traverse the deep temporal and parietal lobes as well as spreading out in the occipital lobe, knowledge of handicap in any of these three lobes may be gained early by careful field tests.

Nystagmus occurs particularly in cerebellar and cerebellopontine lesions. Since this also occurs in families, history here is important. Since the auditory nerve is concerned with balance as well, this sign usually occurs with tumors originating here.

Spasticity and increased reflexes on one side are seen in hemisphere tumors early and later in cerebellar handicaps. Foramen magnum tumors notoriously produce bilateral spasticity.

Hearing handicaps not explainable by ear infections certainly make one want to investigate such cases, particularly by confirmatory evidence of erosion of the internal auditory canal in eighth nerve tumors, which shows up readily on x-ray. In early cases, these can sometimes be removed without even sacrificing the facial nerve. When

one has waited for years until increased intracranial pressure is produced, the operative mortality is high and damages after operation are more severe in survivors. The classical triad of tinnitus, vertigo and deafness bespeak an eighth nerve lesion. Spinal puncture at times shows elevated protein and at times, one must look at the nerve to be sure a tumor is not being overlooked. Meniere's syndrome can be caused by friendly tumors. With hearing already lost and considerable vertigo, the nerve can be cut with benefit to the patient in the absence of tumor. Unsteadiness of gait frequently also bespeaks a cerebellar tumor. Polyuria, polydipsia and polyphagia give early leads to pituitary handicaps.

X-Ray of the skull is of value in demonstrating calcified tumors, shifts of a calcified pineal gland, and bony erosions. In infants and children it also may demonstrate separation of the sutures. While spinal puncture can tell us that we have increased intracranial pressure, an ophthalmoscopic examination frequently tells us this in a much safer fashion. It is usually unwise to do a spinal puncture in the presence of choke or venous engorgement unless the diagnosis of meningitis is strongly suspected. *Even then it is risky.* Brain abscess, a space-occupying mass, may likewise show some meningeal signs, usually also with papilledema. Stiff neck occurs with tentorial or foramen magnum herniations even without meningitis.

To Summarize:

1. Headache of sufficient intensity to require heavy medicine should be neurosurgically investigated.

2. Any convulsion or similar paroxysmal disorder beginning after the age of twenty is a symptom of brain tumor until proven otherwise.

3. The ophthalmoscope should be used regularly by all physicians so that abnormalities will be more quickly recognized.

4. Bony skull masses very strongly suggest underlying tumor.

5. Deafness without explanation on a basis of infection should make one suspect eighth nerve tumor.

THE RELIEF OF DISTRESSING PAIN BY INTERRUPTING NERVE PATHWAYS

EXUM WALKER, M.D.

Atlanta

The relief of pain is a prime responsibility of the medical profession. The ideal approach to this problem is to find and remove the cause of the pain, and when this can be done, it is the best solution. Too often, however, either the cause cannot be determined, or if apparent, it cannot be removed. Whenever the pain is severe or prolonged, it may constitute a perplexing problem and tax the ingenuity of the physician. Continued pain is not only distressing but has a progressive effect on the personality and behavior of the individual, and in time this may so demoralize him that he becomes incapable of carrying on his usual obligations to his family and society.

It is well known that the relief of pain by drugs over a long period of time not only is unsatisfactory, but may add the complication of addiction to an already unhappy state.

In recent years considerable study and research has been carried out to gain a better knowledge of the nature of pain and to learn the anatomic pathways which convey pain impulses. This knowledge along with the rapid advances made in neurosurgical techniques has made possible in most instances a practical solution for the relief of major pain.

Basically, pain may be thought of as the

conscious experience of a distressing sensation. The existence of pain depends on the perception of painful impulses reaching certain centers in the brain and the conscious reaction to the stimuli. The relief of pain by neurosurgical methods has to do with blocking out or destroying the integrity of certain pain pathways or centers. By utilizing these measures physical pain can almost invariably be controlled, although the patient must accept the physiologic loss incident to the procedure. The doctor who is experienced in the task of relieving pain can evaluate the patient's individual problem and judge what course or procedure may be advisable.

Careful consideration should be given to the emotional behavior of the patient as well as to his occupation and his economic and social status. It is necessary to judge the patient's problem as a whole and decide if pain alone is the major factor. Too often one finds that the patient has been subjected to considerable stress other than pain and that he may mislead his physician by erroneously believing that his unhappy state of anxiety is due solely to pain. One must, therefore, meticulously analyze and evaluate the whole of the patient's problem before passing judgment on what is the best solution.

From a practical standpoint it may be convenient to subdivide each patient's problem into three etiologic components and to evaluate and deal with each component separately.

First are the factors other than pain which subject the patient to stress and result in anxiety. These have to do with his individual lack of adjustment to his own life's problems. If these factors are dominant and if proper interpretation and therapy cannot be given by the patient's own physician, then the aid of a psychiatrist should be obtained. The management of this phase will not be elaborated upon in this paper.

Then there is to be considered the nature of the organic pathologic process and an evaluation made of the amount of pain which exists in terms of the quantity of pain impulses which are initiated and transmitted to the brain. This could be called the perception of pain as distinct from the reaction to pain. Or, more simply, one must judge how much pain the patient is actually having and what ends are advisable and justified to control his pain. Whenever it is impractical to control the pain by direct treatment of the lesion itself, then attention can be focused on the mechanism of the pain and the anatomic pathways through which the pain impulses are conveyed to the receptive centers in the brain. Such an approach is the major theme of this paper and will be dealt with in more detail presently.

Finally there is to be considered the patient's reaction to his pain, or simply what it means to him. Proper attention to this component of pain will avoid much confusion and temper one's judgment in treatment.

The perception of pain may be abolished by preventing the impulses from reaching the thalamus or general sensory headquarters. This may be accomplished by interrupting the pain pathways at some level. The reaction to pain can be favorably altered by direct attack on the prefrontal regions of the brain. Certain pain mechanisms may be influenced by direct attack on the sympathetic pathways which supply the affected region.

Section of a peripheral nerve trunk does not often afford any lasting relief and, therefore, is seldom indicated. For regional pain division of cranial or spinal posterior roots often offers an effective and relatively simple means of abolishing pain. Pain involving more diffuse areas may require section of some central pain pathways. The anterior spinothalamic tract conveys pain and tem-

perature impulses and is located superficially so that it may be selectively divided in the spinal cord, medulla or mid-brain. This permanently abolishes the senses of pain and temperature perception below the level on the opposite side and leaves the ordinary sense of touch perception and other functions intact. No serious disability results and the patient can perform normal activities. This procedure is useful whenever the pain is unilateral. Bilateral cordotomy can be performed, but there is some risk of bladder paralysis, so this complication must be considered as a possibility. Bilateral cordotomy is principally used in cases of intractable pain due to cancer. The technic of cordotomy has been greatly simplified so that it has come to be a relatively minor procedure.

Various portions of the sympathetic nervous system may be removed to control pain in a variety of conditions. Visceral pain fibers are included in the sympathetic chains, and an appropriate excision will denervate most of the thoracic, abdominal and pelvic viscera. Also many types of vascular pain and pain due to nerve injuries may be controlled by interrupting the sympathetic nerve supply to the region involved.

Prefrontal lobotomy was initially performed for certain types of psychiatric disorders, but its use in the relief of pain has been a recent innovation. This procedure does not abolish the perception of pain but affects the patient's reaction to it. After bilateral lobotomy the patient is no longer concerned about his pain and will usually not mention it or ask for relief. This operation leaves a definite personality defect and should rarely be performed except as a final resort. It has its greatest usefulness in the relief of pain from cancer.

Unilateral lobotomy is less effective, but has the advantage of leaving so little personality defect that it usually goes undetected. This procedure has been very useful

in certain patients with multiple minor pains associated with a poor adjustment to the problems of life. Much research is underway at present on the localization of function in the prefrontal lobes of the brain. It is hoped that in the near future we may be able to abolish the reaction to pain so that it is no longer a distressing sensation without seriously altering other intellectual functions.

Sciatic Pain is usually due to a lesion of an intervertebral disc, although it may be due to other causes such as a neoplasm or injury to the spine or sciatic nerve. Severe persistent pain can usually be controlled by removal of the disc; however, in some instances it may be necessary to divide a nerve root or perform a cordotomy^{1 2 3}.

Brachial Pain or *Neuritis* is most commonly due to an intervertebral disc lesion in the cervical region. The clinical syndrome and treatment are essentially analogous to that of lumbar intervertebral disc lesions⁴.

Cervico-Occipital Pain or so-called suboccipital neuralgia is probably due to some irritative trauma of the upper cervical nerves. This is a very common occurrence and causes pain and headache which begins in the suboccipital region and is often associated with suboccipital tenderness and aggravation of pain on motion. It can usually be relieved by division of the second and third cervical sensory nerve roots.

Trigeminal Neuralgia or tic douloureux is characterized by transitory paroxysms of severe pain in the face. The cause is seldom apparent, but the pain can be abolished with certainty by division of the posterior root of the trigeminal nerve. In recent years an improved operative approach has been devised in which the pain can usually be relieved, leaving most of the sensation in the face intact with preservation of the corneal reflex^{5 6}.

The *Pain of Angina Pectoris* can be immediately relieved by novocaine injection

in the region of the stellate ganglion. This procedure is simple and its value is not generally appreciated. Cardiac pain can be permanently controlled by removing the upper five sympathetic ganglia or by dividing the analogous thoracic dorsal nerve roots. The patient will still have distressing symptoms of substernal oppression, shortness of breath and sometime pain in the jaw if he over exerts, so the caution signal is not destroyed. This procedure has been widely used in certain areas of the country with good results but has received scant attention in the South.

Abdominal Pain having its origin in the viscera can be relieved by resection of the thoracolumbar region of the sympathetic chain along with the splanchnic nerves.

Renal Pain can be relieved by section of the lower two thoracic and first lumbar dorsal roots.

The *Pain of Dysmenorrhea* usually can be largely relieved or abolished by resection of the superior hypogastric plexus. The resection leaves no detectable loss of function and denervates the pain fibers to the body of the uterus and upper portion of the cervix. It is a very practical and effective procedure to control severe dysmenorrhea and its value has not been generally appreciated.

The *Pain of Herpes* or "shingles" can usually be immediately relieved by novocaine injection of the sympathetic pathways to the region. If this is done in the early stages of the disease a single injection may dramatically stop the pain permanently and avoid the chronic painful phase. In chronic post herpetic pain a sympathectomy or dorsal root section may help, but this is less certain.

The patients who suffer *Intractable Pain from Cancer* can be saved from much suffering by judiciously selecting the appropriate procedure. The results are far superior to

the time-worn custom of administering increasing quantities of narcotic drugs. In the earlier stages it is preferable to diminish or abolish the perception of pain by dividing pain pathways. Later, when the patient is entering the inevitable downhill phase, a lobotomy is better. This will control the pain problem and at the same time release the patient from the anxiety that inevitably accompanies the realization that he is not getting well. After lobotomy the patient is happy, cheerful and does not complain despite his downhill course.

BIBLIOGRAPHY

1. Walker, Exum: Intervertebral Disc Lesions, South. M. J. 38:832-834 (Dec.) 1945.
2. Walker, Exum: Pathology Causing the Sciatic Syndrome, South. Surgeon 9:820-826 (Nov.) 1940.
3. Walker, Exum: Sciatica—Its Cause and Treatment, Dis. Nerv. System 1:38-42 (Feb.) 1940.
4. Walker, Exum: Branchial Neuritis Due to Cervical Intervertebral Disc Lesions. J. M. A. Georgia 38:1-3 (Jan.) 1949.
5. Walker, Exum: The Relief of Pain in Trigeminal Neuralgia, J. M. A. Georgia 29:222-225 (April) 1940.
6. Walker, Exum: A Simplified Suboccipital Technic for Trigeminal, Acoustic, or Glossopharyngeal Rhizotomy, J. Neurol., Neurosurg. & Psychiat. (British)—13:127-129 (May) 1950.

133 Doctors Building, Atlanta.

THE USE OF ANTABUSE IN THE TREATMENT OF ALCOHOLISM *A Preliminary Report of 27 Cases**

JAMES N. BRAWNER, JR., M.D.

ALBERT F. BRAWNER, M.D.

Smyrna

In 1948 a new treatment for alcoholism was first reported by Martensen-Larsen^{1,2} of Denmark. This was based on the sensitization of individuals to ethyl alcohol by tetraethylthiuramdisulphide, a drug which has been given the trade name "Antabuse".

The use of this drug as a possible treatment for alcoholism was suggested by Hald and Jacobsen³. They and their co-workers^{3,4,5,6,7,8} reported studies of its toxic and pharmacologic properties. They found that individuals who had taken 1 Gm. or more of antabuse 12 to 24 hours before, were sensi-

*The Antabuse used in this study was generously furnished by Ayerst, McKenna & Harrison, Ltd., 22 East 40th Street, New York City, N. Y.

Read before the Medical Association of Georgia in annual session, Macon, April 20, 1950.

tized to ethyl alcohol to the extent that a small and otherwise innocuous amount of any alcoholic beverage resulted in a prompt and disagreeable reaction. This antabuse-alcohol reaction consisted chiefly of a circulatory, vasomotor and respiratory disturbance characterized by intense redness of the face, eyes, neck and chest; perspiration, tachycardia and dyspnea; subjective sensations of smothering, uneasiness, marked palpitation, a throbbing headache and in the later stages frequent nausea and vomiting.

It was found that the antabuse-alcohol reaction was caused by an abnormally high concentration of acetaldehyde in the blood. This occurred with a blood alcohol content as low as 10-20 mg. per cent, a level which produces no symptoms in persons not sensitized by antabuse. The reason for this increase of the blood acetaldehyde is not yet known, but Hald and Jacobsen⁵ considered it to be the result of a disturbance of the alcohol oxidizing enzyme, dehydrogenase.

The Scandinavian workers also found that antabuse could be administered daily to human subjects and animals for a long time in moderate doses without appreciable toxic effects so long as alcohol was not consumed. It was found to be eliminated from the body slowly and for this reason a person who had been taking antabuse regularly would remain sensitized to alcohol for six to eight days.

In Canada, Bell and Smith⁹ reported favorable results in 9 alcoholic patients treated with antabuse. Gelbman and Epstein¹⁰ found that out of 55 alcoholic patients treated 45 had not reverted to their old habits of drinking. Antabuse was made available on prescription in Canada in 1949. In regard to this Ferguson¹¹ commented editorially: "The burden of responsibility which has been thrown so suddenly on the general practitioner is heavy and unfair".

Four deaths have so far been mentioned, two by Danish investigators¹² in patients

with diabetes mellitus; one by Jacobsen and Martensen-Larsen¹³ in which antabuse was given to a 60 year old man while drinking heavily, and one by Jones¹⁴ from Halifax, Nova Scotia. The latter was the death of a 29 year old male which occurred 2 hours and 25 minutes after a test drink with 30 cc. of rum. He had received 5.5 Gm. of antabuse over the previous five days. Autopsy "left little doubt as to the cause of death, namely an acute congestive right-sided heart failure, but gave little indication as to why this cardiac failure should have occurred".

The first publication in the United States was by Jacobsen and Martensen-Larsen¹³. They gave an excellent review of the pharmacologic properties of antabuse and reported 99 alcoholic patients who had been under treatment in Denmark for six months or more. Of these 99 patients 52 were considered "socially recovered", and 19 as "much better". Glud¹² recently reviewed the studies of the Scandinavian workers and made suggestions for the use of antabuse in the United States.

From these early reports it appeared that treatment of alcoholic patients with antabuse was promising, but all agreed that it should be used cautiously and should always be combined with a general plan of treatment including psychotherapy and all other available measures.

Present Study

The purpose of this paper is to present our experiences and results with antabuse in 27 alcoholic patients who began treatment between July 1, 1949 and January 1, 1950, and who were followed until March 15, 1950. In the short time elapsed we realize that no accurate appraisal can be made of any treatment for alcoholism. From this brief experience, however, some interesting and instructive data concerning antabuse have been recorded. Careful observations have been made on 76 antabuse-alcohol re-

actions produced with different kinds and amounts of alcoholic beverages. A preliminary evaluation of antabuse in the treatment of alcoholism is attempted from the results obtained. Finally, a description of the antabuse-alcohol reaction seems justified. Physicians everywhere are likely to encounter a person who has been taking antabuse and who has tried to drink; therefore knowledge of this reaction may prove helpful.

Selection of Patients

All alcoholic patients who were admitted after July 1, 1949 were informed of the general nature and the availability of antabuse treatment. If interest was expressed in it the requirements for treatment were explained in detail to the patient and a responsible relative. They were informed particularly that antabuse was not "a cure" for alcoholism; that its use was still in the "clinical trial" stage and could be used only under close supervision. They were told that antabuse was intended as an added means of maintaining abstinence from alcohol while an individual became better adjusted in life physically, emotionally, socially, economically, spiritually, and until alcohol was no longer needed for support or escape.

Contraindications and Precautions

For the present time it has been suggested by the distributors that antabuse not be administered to patients with diabetes mellitus, myocardial failure or coronary disease, pregnancy, goiter, epilepsy, cirrhosis of liver, hepatitis, nephritis and in patients addicted to drugs as well as alcohol. Antabuse should not be given to patients who are drinking, who have been treated recently with paraldehyde, nor should paraldehyde be administered to those taking antabuse. Because of the definite circulatory effect in the antabuse-alcohol reaction any symptom or suggestion of cardiovascular disease should be carefully

studied. Essential hypertension does not seem to be a contraindication.

Study and Treatment of Patient Prior to Antabuse Therapy

Patients were sobered and received supportive measures of adequate nourishment, vitamins, glucose, insulin and fluids. A detailed history was obtained especially in regard to the family background, environmental factors, personality traits and illnesses which may have had a bearing on the alcoholic problem. Careful physical, neurologic and psychiatric examinations were made, keeping in mind the above contraindications. The routine laboratory studies consisted of a complete blood count, sedimentation rate and urinalysis. Electrocardiograms, determinations of liver and renal functions were made when indicated. A mature psychotherapeutic relationship was attempted as soon as possible, stressing the importance of this phase of treatment, of regular consultations and follow-up visits until and after antabuse therapy becomes no longer necessary.

Plan of Treatment

If there were no contraindications and no alcohol had been taken for at least seven days the drug was begun. About 9:30 a.m. each day the following dosage was given:

1st day—Antabuse	2.0 Gm.	(4 tablets)
2nd day—Antabuse	1.5 Gm.	(3 tablets)
3rd day—Antabuse	1.0 Gm.	(2 tablets)
4th day—Antabuse	0.5 Gm.	(1 tablet)
5th day and after	0.125 Gm. to 0.5 Gm. daily as necessary.	

Patients were advised to remain in the hospital during the start of antabuse treatment. Some of them completed their hospital period of sobering and supportive treatment, went home for a short stay and then returned after seven days of abstinence to start on antabuse.

On the fourth day of antabuse treatment a test drink was given. This consisted at first of 45 cc. of 86 proof (43 per cent alcohol by volume) blended whiskey for the

average size person and 30 cc. for those who were small or undernourished. Due to the initial severe reactions, one of which was alarming after 45 cc. of whiskey, we have more recently been giving only 20 cc. to 30 cc. of whiskey. In most cases this was enough to produce a definite and moderately severe reaction. It was intended for the first or second reaction with alcohol to be sufficiently severe for the patient to know what to expect when one becomes sensitized with antabuse. During the reaction the patient was impressed with the relation between the amount of alcohol consumed and the degree of discomfort. Some workers administered the test drinks by allowing patients to drink as much of their usual beverage as desired. Because of potential dangers resulting from an excess of alcohol it was always our practice to administer a safe amount at one time and to supplement this with an additional amount if the reaction failed to reach the desired intensity. This was necessary in only a few instances.

All patients were required to remain overnight following the first test drink. Most of them were discharged the fifth day at which time they were informed about the daily dose to be taken regularly thereafter. Adjustments in dosage were necessary because of certain disturbing symptoms, all of which were eventually controlled after a few weeks of treatment.

The second visit was from 4 to 7 days after the first alcohol test had been given. At this time another test was scheduled with smaller amounts of whiskey or with beer or wine if these beverages had been used. Some patients were given as many as five test drinks on different occasions, but the average was three per patient. During the first month the patient was asked to return each week, but as time elapsed it became more and more difficult to encourage visits this often. After the third month of treatment all patients were asked to return at

least every two or three months. Laboratory studies on blood and urine were made at frequent intervals.

The Antabuse-Alcohol Reaction

Immediately before the alcoholic beverage was given record was made of any effects which the patient may have experienced from antabuse alone; the pulse and respiration rates were counted, blood pressure recorded and the oral and facial skin temperatures were measured. The color of the skin over the body, the vascularity of the sclerae and the odor of the breath were noted. The time was recorded at which the kind and amount of beverage was taken. The above observations were repeated every five to ten minutes, all other objective and subjective symptoms being observed and recorded.

Within two to four minutes practically all patients, regardless of the amount or kind of alcoholic beverage consumed, experienced a feeling of warmth in the face and showed a distinct redness in the skin of the cheeks, forehead and neck. An immediate rise of from two to five degrees in the facial skin temperature was an indicator of the degree of vasodilatation which had occurred. Also in most patients we observed a mild cough in the early minutes of the reaction followed by a sense of smothering and mild dyspnea which was typical of the early respiratory effect. To these early circulatory and respiratory symptoms are added the following objective and subjective changes listed in the order of their appearance:

A. Objective Changes Noted:

1. Redness and flushing of face, neck and chest.
2. Tachycardia; precordial and cervical pulsations.
3. Cough; hyperpnea.
4. Injection of sclerae; edema of eyelids and lips.

5. Strong odor of acetaldehyde on breath.
6. Drop in blood pressure.
7. Perspiration.
8. Tremors and other features of a severe "morning after".
9. Generalized vasodilatation.
10. Engorgement of veins and dilatation of arterioles of retina.
11. Pallor; sudden slowing of pulse, vomiting.
12. Yawning, drowsiness, sleep.
13. Recovery and resumption of activities.
14. Aversion to more alcohol.

B. *Subjective Changes Noted:*

1. Feeling of heat in face and ears.
2. Sensation of smothering; substernal pressure; tightness of throat.
3. Palpitation and pounding of heart.
4. Stinging of eyes; blurring of vision.
5. Feeling of apprehension and uneasiness.
6. Nervousness similar to that of a bad "hangover".
7. Dizziness, weakness and faintness especially in the erect position.
8. Throbbing headache; roaring in ears.
9. Generalized discomfort and malaise.
10. Aching in legs; numbness in hands and feet.
11. Nausea and at times vomiting.
12. Desire to sleep.
13. Upon awakening relaxed and refreshed.
14. Desire for food.
15. No desire for another drink during or after reaction.
16. "Never before such an experience from such a small drink".

Vasomotor Symptoms: The vasodilatation which occurred two to three minutes after alcohol consumption first appeared about the cheeks or ears, spread rapidly over the entire face, then to the neck, chest and upper extremities. In more severe re-

actions this was evident over the entire body after about 40 minutes. There was increased perspiration especially on the palms and the soles. The sclerae became typically "blood shot" and remained so until the reaction subsided. Ophthalmoscopic examinations showed dilatation of the arterioles and moderate engorgement of the veins of the retina. The increase in the skin temperature of the cheek during the reaction served as an accurate measure of the degree of facial vasodilatation, but it was no indication of the ultimate severity of the total reaction.

When this vasodilatation had been extreme and especially when the patient sat or stood erect, the marked flushing often gave way to an extreme pallor not unlike that seen in shock. At this time the pulse volume became small and rate often slowed rather suddenly from the previously accelerated rate. At times a bradycardia of 50 to 60 was observed. A rapid drop in blood pressure always accompanied this syncope. The recovery from this state was gradual and was usually completed in from 1 to 2 hours. In two of the more severe reactions oxygen, coramine and adrenalin were used.

Circulatory Symptoms: In addition to the above peripheral changes, there was a tachycardia often as high as 130 to 150 per minute. The systolic and diastolic pressures in most instances dropped. This drop was rather extreme when the person had consumed 30 cc. or more of whiskey or 360 cc. of beer.

Respiratory Symptoms: The first effect on the respiratory system was often an asthma-like cough, followed by an increasingly severe shortness of breath, a heavy substernal pressure and constriction about the throat. This resulted in fear, uneasiness and discomfort until the peak of the reaction had passed. Extreme dyspnea and hyperventilation were relieved by inhalation of pure oxygen or carbogen, but this had little effect in relieving the entire reaction.

The work of Asmussen, Hald, Jacobsen and Joergensen⁴ showed evidence of bronchodilatation with an increase in ventilation and in the respiratory dead space.

Gastrointestinal Symptoms: When the reaction was severe and especially when the marked flushing gave way to pallor, nausea and vomiting often occurred.

Neurologic Symptoms: The effect on the nervous system during the antabuse-alcohol reaction was manifested by nervousness, tremors, dizziness, headaches and blurred vision. In the later stages there was definite drowsiness and desire to sleep. Several patients complained of transient numbness in the extremities and of pain in the legs. No convulsions occurred in this series, but one typical generalized seizure has been observed subsequently in a 34 year old male 30 minutes after receiving 20 cc. of 86 proof whiskey as his first test drink. Con-

vulsions have been reported previously¹³, but have not occurred very often.

TABLE 1
Proportion of Male and Female
Alcoholic Patients Accepting Antabuse From
July 1, 1949 to January 1, 1950

	All Alcoholic Patients Admitted	No. Patients Accepting Antabuse	Per Cent Accepting Antabuse
Male	205	17	8.3
Female	24	10	41.6
Total	229	27	11.8

The severity of the antabuse-alcohol reaction is described as follows (Table 2):

1. An *alarming reaction* was characterized by flushing, marked dyspnea and tachycardia; fall in blood pressure to an extreme degree; almost imperceptible pulse; semistupor, pallor and appearance of shock. Supportive measures of adrenalin, coramine, oxygen and intravenous fluids were used. The duration was about 3 hours (fig. 1).

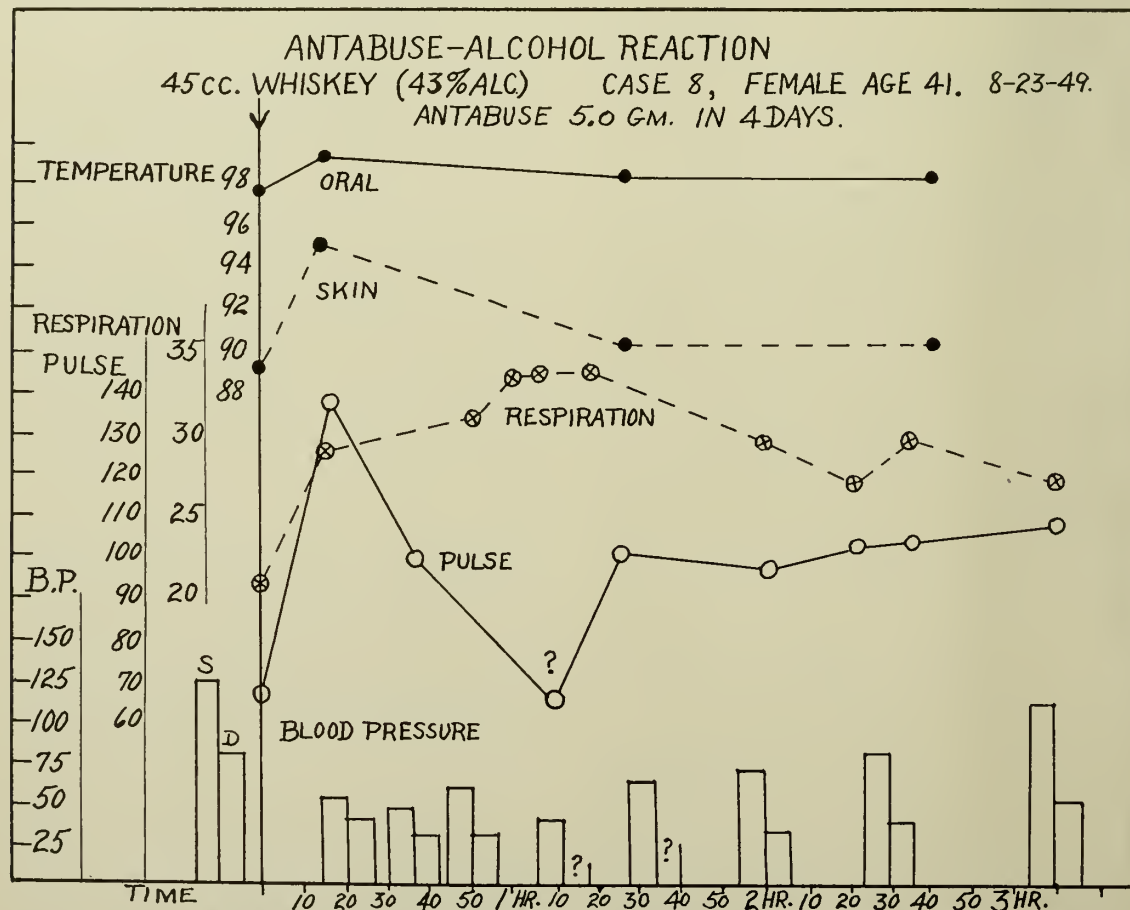


Fig. 1. Changes in temperature, respiration, pulse and blood pressure during an alarming antabuse-alcohol reaction produced by 45 cc. of 86 proof whiskey.

TABLE 2

Degree of Reaction in 76 Test-Drinks With Various Amounts of Whiskey, Beer and Wine.

	Amount Whiskey cc. (43% alcohol by volume)						Amount Beer oz.				Sherry Wine 45 cc.
	45	37.5	30	22.5	20	15	12	8	6	4	45 cc.
Alarming Reaction	1	0	0	0	0	0	0	0	0	0	0
Severe Reaction	4	2	10	6	0	0	3	0	2	0	1
Moderate Reaction	1	0	9	1	1	1	1	1	5	0	0
Mild Reaction	0	0	0	2	1	20	0	1	2	1	0
Totals	6	2	19	9	2	21	4	2	9	1	1

2. A *severe reaction* consisted of generalized vasodilatation, marked tachycardia, dyspnea, malaise, nausea and at times vomiting; drop in blood pressure, weakness, intense drowsiness and desire to sleep. Oxygen was used to combat dyspnea. Duration $1\frac{1}{2}$ to 2 hours.

3. A *moderate reaction* was one showing intense flushing of face, neck and upper trunk; moderate tachycardia and dyspnea; slight drop in blood pressure and a mild degree of generalized discomfort. Duration about one hour.

4. A *mild reaction* was characterized by a definite flushing of face, injection of eyes, slight increase in pulse rate, but no appreciable change in respirations and blood pressure. Duration of from 30 minutes to one hour.

Results

From July 1, 1949 to January 1, 1950 treatment with antabuse was accepted by 17 out of a total of 205 male alcoholic patients admitted, and by 10 out of a total of 24 female alcoholic patients admitted (Table 1). On March 15, 1950 the condition of these 27 patients, as far as alcohol is concerned, was grouped as follows: (Table 3 and 4):

Group A. There were 13 patients (10 male and 3 female) who were abstinent and were making a satisfactory adjustment; only 2 had attempted to drink and in each case this was a small amount for one day only. Of these 13 patients 9 continued taking antabuse, and 4 had remained abstinent from 3 to 7 months after it was discontinued.

Group B. An additional 7 patients (3

TABLE 3

Summary of 27 Alcoholic Patients Starting Treatment With Antabuse July 1, 1949 to January 1, 1950

Case No.	Sex/Age	Years Drinking	Date Antabuse Started	Final Daily Dose Gm.	Treatment Stopped; *with advice	Relapsed	Resumed Antabuse	Results to March 15, 1950
1	M/33	16	7/9	0.5	No	No	—	Abstinent
2	M/29	14	7/15	0.5	Yes	Yes	Yes	Much better
3	F/39	18	7/18	0.125	Yes*	Yes	No	Much better
4	F/35	16	8/3	0.25	Yes	Yes	Yes	Much better
5	M/41	20	8/5	0.25	No	No	—	Abstinent
6	M/42	15	8/9	0.25	Yes*	Yes	No	Unchanged
7	F/30	16	8/10	0.25	Yes	No	No	Abstinent
8	F/41	12	8/20	0.25	Yes*	Yes	Yes	Unchanged
9	F/38	13	8/20	0.375	Yes	Yes	No	Unchanged
10	M/35	12	8/27	0.25	Yes	1 day only	Yes	Abstinent
11	M/23	8	8/29	0.5	Yes	Yes	Yes	Much better
12	F/38	20	9/2	0.25	Yes	Yes	Yes	Much better
13	M/46	20	9/14	0.25	Yes	Yes	Yes	Much better
14	M/36	20	9/14	0.25	Yes	No	No	Abstinent
15	M/47	15	9/16	0.125	Yes	No	No	Abstinent
16	F/47	23	9/20	0.5	Yes	Yes	Yes	Much better
17	M/48	14	9/20	0.125	Yes*	No	Yes	Abstinent
18	M/36	20	9/21	0.25	Yes	Yes	No	Unchanged
19	M/54	32	9/28	0.125	No	No	—	Abstinent
20	M/34	15	9/30	0.5	No	No	—	Abstinent
21	M/44	18	10/21	0.25	No	No	—	Abstinent
22	M/38	14	10/30	0.5	Yes	Yes	No	Unchanged
23	F/37	19	10/31	0.5	Yes	Yes	No	Unchanged
24	M/40	20	11/9	0.25	No	No	—	Abstinent
25	F/42	22	11/15	0.25	Yes	1 day only	No	Abstinent
26	F/35	5	12/13	0.5	Yes	No	No	Abstinent
27	M/40	20	12/20	0.125	Yes*	No	No	Unchanged

male and 4 female) were considered "much improved". Each of these had had one or two short relapses, but had resumed antabuse treatment; six required readmission for control while one was able to stop drinking at home. With one exception all seven had discontinued antabuse against advice.

TABLE 4
Results in 27 Patients Followed to March 15, 1950

	Abstinent and adjust- ing well	Much better	Unchanged	
Number	13	7	7	
Patients	20			
Per cent	48	26	26	
	74			
99 Patients	52	19	28	(Somewhat
Jacobsen,	71			better and
Martensen-				unchanged)
Larsen (13)				
Per cent	52.5	19.1	28.4	"
	71.6			

Group C. There were 7 patients (4 male and 3 female) who discontinued treatment with antabuse, two on our advice, and whose condition in regard to alcohol is considered "unchanged". Four of these patients were readmitted by us; one by another psychiatric hospital, and the fate of the other two was not determined except to the extent that they continued drinking.

TABLE 5
*Side Effects of Antabuse Alone During and After
First Four Weeks of Treatment in 27 Patients*

Symptom	Number Patients First 4 Weeks	Number Patients After 4 Weeks
No complaints	1	15
Drowsiness	21	1
Fatigue	9	3
Headache	6	2
Anorexia	3	1
Abdominal cramps	3	0
Depression	2	1
Hyperactivity	1	0
Nausea	1	0
Bad Taste	1	1
"Heartburn"	1	0
"Gas"	1	0
Inability to concentrate..	1	0
Dizziness	0	1
Dermatitis	0	1
"Antabuse Odor" to		
Breath	5	12

Side Effects of Antabuse: Table 5 shows the various early and late effects of antabuse when the patient does not drink. Drowsiness, fatigue and headaches were the

most common complaints during the first four weeks of treatment, but after the maintenance dose was adjusted these symptoms usually disappeared. The drowsiness and sedative effect when not too severe were considered helpful and desirable. At times the daily dose was recommended to be taken in the evening in order to avoid undue drowsiness during the day and to obtain benefit of the relaxation and rest at night.

The abnormal fatigue was often a disturbing symptom, but also was transient and could be controlled by reduction of the daily dose to a slightly lower level. An unusual odor to the breath was detected by others in 5 patients who had been taking antabuse for less than 4 weeks and in 12 patients who had been taking it for a longer time. This odor seemed to us to be different from the acetaldehyde odor noticed with alcohol. It is referred to as the "antabuse odor". The "bad taste" complained of by two patients was associated with this "antabuse odor" on their breath. It is our belief that antabuse when of sufficient concentration in the body to produce sensitivity to alcohol, imparts a characteristic odor to the expired air in a good many instances and when detected will prove helpful as a means of knowing that regular and adequate dosage is being maintained by the individuals.

TABLE 6
*Duration of Treatment; Number of Relapses
and Resumption of Antabuse*

Duration of Treatment (Mo.)	Continuous Treatment	Interrupted Treatment against advice	Interrupted Treatment on advice
1 or less	—	6	3
2	—	4	—
3	—	3	—
4	2	1	1
5	2	2	1
6	—	—	—
7	1	—	—
8	1	—	—
Total	6	16	5
Number Relapsed	0	15	3
Number Resumed Antabuse	—	7	2

No effect was observed on the cellular elements of the blood or in the urinary findings during follow-up examinations. As a whole the side effects of antabuse alone are minimal and subside in three or four weeks and after adjustment of the daily dosage.

Maintenance Dose: Of the 27 patients taking antabuse, sensitivity to alcohol was maintained without appreciable side effects in 7 patients with 0.5 Gm. daily; in one patient with 0.375 Gm. daily; in 13 patients with 0.25 Gm. daily and in 6 patients with 0.125 Gm. daily. When reduction in dosage was made a subsequent test drink was advised and given in most instances. This was to determine the sensitivity of a patient by the appearance of a mild reaction when about 15 cc. of 86 proof (43 per cent alcohol by volume) whiskey was consumed.

Duration of Treatment: It has not yet been determined how long antabuse should be continued. This must be decided between the physician and patient when it is agreed that a satisfactory adjustment is being made and control without antabuse is possible and desirable. On March 15, 1950 only six patients (Cases 1, 5, 19, 20, 21, 24) continued taking antabuse without interruption for periods of four to eight months (Table 6).

Sixteen patients stopped taking antabuse at one time or another on their own accord. The usual reason was that "it was no longer needed or desired". The time elapsed after treatment started until it was stopped was from three weeks to five months. Among this group of 16 individuals 13 are known to have relapsed. Two others drank small amounts for 24 hours or less, resumed antabuse immediately and maintained control thereafter. One female patient deliberately stopped taking antabuse a week before an anticipated New Year's Eve party so this could be duly celebrated. Hospital admission was necessary two weeks later, but she

resumed antabuse as soon as possible and has remained abstinent since then.

Complications Causing Termination of Treatment: Five patients were advised by us to discontinue antabuse. The first occasion was following a severe reaction in a 41 year old female (Case 8, Fig. 1). For her first test drink she was given 45 cc. of 86 proof whiskey and the alarming reaction of collapse, apparent shock and impending death was such that we preferred to suggest that she not continue with treatment. A few weeks later, however, she returned requesting antabuse again, but without further test drinks. To this we agreed, but the holiday temptation was irresistible for her. Antabuse was discontinued and relapse occurred. She has subsequently received treatment by us and recently elsewhere.

The second instance (Case 6) was because of a small coronary thrombosis in a 42 year old male who had been taking antabuse for 26 days. For 17 days preceding his heart attack his daily dose had been reduced to 0.125 Gm. due to complaints of fatigue and inability to concentrate. An electrocardiogram prior to the start of antabuse was reported "normal", but afterwards showed evidence of myocardial damage suggestive of a small coronary occlusion. Antabuse treatment with us was not resumed by this patient. Shortly thereafter he relapsed and is reported above as one whose condition is "unchanged". Recently, however, we have learned that he has resumed antabuse therapy elsewhere.

The drug was discontinued in a 39 year old female (Case 3) who developed an acneform rash over her face. She had taken antabuse daily for four months. The rash disappeared after treatment was stopped. Relapse occurred 2½ months later, required hospital treatment, and was followed by no desire to resume antabuse. Gelbman and Epstein¹⁰ reported the occurrence of

rashes which were controlled with pyribenzamine and did not necessitate termination of treatment.

A fourth patient (Case 17) was advised to discontinue antabuse during a short hospital stay for treatment of a reactive depression. Upon discharge antabuse was resumed. His depression resulted from obvious conflicts in his environment and in our opinion was not related to medication. He has remained abstinent for over five months despite unusually difficult problems in his environment.

Antabuse was stopped when a 40 year old male (Case 27) with schizoid tendencies became psychotic after only 4 weeks treatment. He had had previous attacks and had accepted treatment with antabuse reluctantly in order to satisfy an overly concerned mother. His condition is considered "unchanged" as related to alcohol.

Summary and Conclusions

1. The present status of the treatment of alcoholic patients with antabuse is briefly reviewed.

2. Among 229 alcoholic patients admitted during a six month period, there were only 27 patients (11.8 per cent) who accepted antabuse therapy.

3. To date there were 13 patients (48 per cent) treated with antabuse who were abstinent and were making a satisfactory adjustment; there were 7 patients (26 per cent) considered "much better", and 7 (26 per cent) who were not improved.

4. In this group of 27 patients there were 76 antabuse-alcohol reactions produced with different kinds and amounts of alcoholic beverages. The severity of the reaction varied to some extent with different individuals who consumed the same volume of alcohol, but generally it depended on the total alcohol consumption.

5. In addition to the usual circulatory and respiratory changes described in earlier

reports it was observed that a definite effect on the blood pressure does occur. There was a marked decrease in both systolic and diastolic pressures when more than 20 cc. of whiskey was consumed.

6. One alarming reaction was observed, supporting more recent observations that potential dangers are present and that antabuse should be used cautiously.

7. The most common side effect noticed by patients taking antabuse was drowsiness. When not too severe this proved helpful and desirable. There was a disagreeable odor detected on the breath of almost half the patients taking antabuse, but otherwise the side-effects were minor and transient.

8. The results of this study are encouraging and compare favorably with those of earlier reports.

9. Much more time is necessary before an accurate appraisal of antabuse therapy can be made. It should be combined with all other measures for physical, emotional and social rehabilitation of the alcoholic patient. Antabuse can help the patient maintain sobriety while these adjustments are being made.

REFERENCES

1. Martensen-Larsen, O.: New Lines in Treatment of Alcoholics, *Ugesk. f. læger*, 110:1207 (Oct.) 1948; (Quoted by Martensen-Larson; reference 13).
2. Martensen-Larson, O.: Treatment of Alcoholism with a Sensitizing Drug, *Lancet* 255:1004 (Dec. 25) 1948.
3. Hald, J.; Jacobsen, E., and Larsen, V.: The Sensitizing Effect of Tetraethylthiuramdisulphide (Antabuse) to Ethylalcohol, *Acta pharmacol. et toxicol.* 4:285, 1948.
4. Asmussen, E.; Hald, J.; Jacobsen, E., and Jorgensen, G.: Studies on the Effect of Tetraethylthiuramdisulphide (Antabuse) and Alcohol on Respiration and Circulation in Normal Human Subjects, *Acta pharmacol. et toxicol.* 4:297, 1948.
5. Hald, J.; and Jacobsen, E.: The Formation of Acetaldehyde in the Organism after Ingestion of Antabuse (Tetraethylthiuramdisulphide) and Alcohol, *Acta pharmacol. et toxicol.* 4:305, 1948.
6. Asmussen, E.; Hald, J., and Larsen, V.: The Pharmacological Action of Acetaldehyde on the Human Organism, *Acta pharmacol. et toxicol.* 4:311, 1949.
7. Larsen, V.: The Effect on Experimental Animals of Antabuse (Tetraethylthiuramdisulphide) in Combination with Alcohol, *Acta pharmacol. et toxicol.* 4:321, 1948.
8. Hald, J.; and Jacobsen, E.: A Drug Sensitizing the Organism to Ethyl Alcohol, *Lancet* 255:1001 (Dec. 25) 1948.
9. Bell, R. G., and Smith, H. W.: Preliminary Report on Clinical Trials of Antabuse, *Canad. M. A. J.* 60:286, 1949.
10. Gelbman, F., and Epstein, N. B.: Initial Clinical Experience with Antabuse, *Canad. M. A. J.* 60:549, 1949.
11. Ferguson, J. K. W.: Editorial, *Canad. M. A. J.* 60:295, 1949.
12. Glud, E.: The Treatment of Alcoholic Patients in Denmark with "Antabuse" with Suggestions for its Trial in the United States, *Quart. J. Stud. on Alcohol* 10:185 (Sept.) 1949.
13. Jacobsen, E., and Martensen-Larsen, O.: Treatment of Alcoholism with Tetraethylthiuramdisulphide (Antabuse), *J. A. M. A.* 139:918 (April 2) 1949.

14. Jones, R. O.: Death Following the Ingestion of Alcohol in an Antabuse Treated Patient, *Canad. Med. A. J.* 60:609 (June) 1949.

ADDENDUM

Follow-up of these 27 patients to November 1, 1950 reveal that eight continue their abstinence, four of whom are still taking antabuse. Six patients are considered much improved, but only two are taking antabuse. A total of 13 of the 27 patients have discontinued antabuse, have returned to their regular habits of drinking and are considered unchanged.

No serious difficulties have arisen in the continued use of this drug.

Brawner's Sanitarium, Smyrna, Georgia.

NOTE: The foregoing papers are a part of a symposium. Discussion of them will follow completion of the publication of the symposium, in the December, 1950, number of THE JOURNAL.—Ed.

DOCTORS AND THE PUBLIC

JOHN E. DREWRY

Athens

There is probably no name in medical history held in higher esteem than that of the late Sir William Osler, who practiced and taught at Johns Hopkins in Baltimore and at Oxford University in England. He was the author of a book, "Principles and Practice of Medicine", which was a basic text of thousands of contemporary practitioners, and was himself the subject of several important books, one of which, Dr. Harvey Cushing's "The Life of Sir William Osler", published in 1925, won the Pulitzer prize. So wise were Dr. Osler's observations on such a variety of subjects that only this fall—31 years after his death—a new book called "Osler Aphorisms" has appeared, and undoubtedly it will have a substantial sale. The teaching and personality of this man, according to Webster's Biographical Dictionary, "strongly influenced medical progress", and it is for this reason, among others, that I turn to him for the text of my remarks on medical public relations.

The story is told (in "For Doctor's Only" by Dr. Francis Leo Golden) that one day as Dr. Osler was leaving the hospital, a patient called out from a nearby bed, "Good morning, Doc." The great physician made no reply, but when he reached a corridor, he turned to the interns who were accompanying him and said:

"Beware of the men who call you Doc. Rarely do they pay their bills."

This admonition, with all its public relations implications, is my text of the evening.

(Dean, Henry W. Grady School of Journalism, The University of Georgia; Vice-President, Association of Accredited Schools and Departments of Journalism; formerly President, American Association of Teachers of Journalism; Author or Editor, "Concerning the Fourth Estate", "Post Biographies of Famous Journalists", "More Post Biographies", "Book Reviewing", "Contemporary Journalism", etc.).

Address delivered at the statewide press conference of the Medical Association of Georgia, Atlanta, October 2, 1950.

What does this statement mean? ("Beware of the men who call you Doc. Rarely do they pay their bills.")

Are doctors primarily interested in their fees?

Do they place money above human relationships?

Do they want the proper distance kept between them and their patients?

Are their ministrations, like their Latin prescriptions, to be expressed in a language classical and incomprehensible to the masses?

Above all, is the attitude of professional medicine toward the public, and the agencies of public relations, a little like that of big business of yesterday: "The public be damned!"?

And is this attitude, as was the case with the corporations, intensified by fear? In the case of business—fear of government intervention? In the case of medicine—fear, again of government, but in this instance known as socialized medicine?

Fear, undoubtedly, is at the bottom of much bad medical public relations. But it is more than fear of socialized medicine. It is a fear much more general and fundamental. It is the fear of the unknown, and in the case of most doctors, the unknown is public relations—its purposes and techniques. Coupled with this frightening ignorance are a training, a tradition, and an ethical concept which eschew publicity. Doctors don't advertise and they are suspicious of those who get into the public prints (no matter how dignified the reference or reputable the publication). Dr. Osler had something of this point of view—although printer's ink played a far greater part in the establishment of his great reputation than many doctor critics may realize. Wrote Dr. Osler:

"In the life of every successful physician there comes the temptation to toy with the Delilah of the press—daily and otherwise. There are times when she can be courted with satisfaction, but beware! Sooner or later she is sure to play the harlot, and has left many a man shorn of his strength, namely the confidence of his professional brethren."

The doctor does not, of course, want to be shorn of his strength—of his professional reputation. He is jealous of the esteem in which he personally and his profession are held. He wants, if he be the right kind of physician, to enhance the standing of both. The prescription then, is that of Holy Writ. "Heal thyself". "Know ye the truth and the truth shall make you free". He must analyze the fears that are at the root of many of medicine's public relations problems; he must put into language those that have been un verbalized; he must deal adequately with those which merit attention; and he must free himself of the paralysis of what Roosevelt called the greatest of all fears—fear of fear itself—the professional equivalent of a child's fear of the dark.

What then is the treatment? There is no gen-

eral panacea, and the several phases of medicine—general practitioner, specialist, hospitals, public health, nurses—all have their special problems. But there are a few general principles which may well serve as the basis of individual or group action.

Do you know and are you concerned about the answers to such questions as these:

What is it about doctors and medical practice that the public does not like?

Which of these complaints have merit, and what can doctors do about them?

What is the public?

Could it be that there is more than one public?

Are doctors, as such, aware of Capital and Labor, of civic clubs and veterans' organizations, of Congress and the Senate, of the Church and public education—and a host of similar groups, all of which are potential friends or enemies?

In the answers to such questions as these lies the beginning of wisdom in so far as good public relations are concerned. As another one of your speakers, Larry Rember of the American Medical Association, has so well put it, "Medical public relations is a continuous process by which the medical profession endeavors to obtain the confidence and good will of the public—inwardly by self-analysis and correction to the end that the best interests of the people will be served; outwardly by all means of expression so that the people will understand and appreciate that their welfare is the profession's guiding principle."

Did you notice that phrase—"by self-analysis and correction"? What are some of the areas in which doctors may well do some professional soul-searching? You know these, of course, better than I, a layman, would. But I have read some things that are not too complimentary to you about fees; about kick-backs in the sale of spectacles, drugs, and through referrals; about keeping patients waiting in your outer offices much too long; about treating the ailment rather than the person; about discourteous brush-offs of newspaper men whose missions are perfectly legitimate; about unkind references to *Reader's Digest*, *Time*, and other publications which are making a serious and intelligent effort to work with and for the medical profession in the attainment of better health for more of the people; about a high and mighty and holier-than-thou attitude toward those whom you are pledged to serve and toward those social agencies, such as the press and radio, which should and would like to be your allies.

Many are the times that I have told our journalism students that the newspaper is for society what the doctor is for the individual, and that this is the age of preventive rather than curative medicine. The press is concerned with the ills of society, just as you are with the ailments of the individual—or stated in the language of preventive medicine, the press would promote

the health of the body politic just as you would see that the individual remains well. This means that the agencies of communication are potentially your friends. But you must know these agencies, and the men and women through whom they function, if you are to enjoy this friendship and its benefits.

It is not without significance that propaganda—which is just another word for public relations—is of religious origin. The word derives from the College of Propaganda which was instituted by Pope Urban VIII (1623-41) during the 17th century to educate priests. Propaganda or publicity is, therefore, a phase or form of education. And its greatest development has been during the present century. There are some fairly obvious and altogether logical reasons for this, among which are:

1. The complexity of modern civilization makes it impossible for any newspaper anywhere to cover all sources of news. This applies equally to the great metropolitan journal with its many reporters and to the small weekly with one man doubling in brass as reporter, editor, advertising and circulation manager, linotype operator, make-up, and press man. It applies also to press services, such as the A.P., U.P., and I.N.S., and to the magazines. Much worthwhile news, therefore, must be provided the press through public relations offices if it is ever to be published.

2. Specialized subjects—and certainly medicine is one of these—need to be treated by those who understand them. A few of the better-heeled newspapers and magazines are able to employ science and medical writers, but the rank and file of publications can do a better job of interpreting medicine to the public if the stories are processed for readability and truth by a public relations man or woman who has the point of view of both the doctor and the press or radio.

3. Institutions and professions supported by and/or serving the public—and these would certainly include hospitals, doctors, dentists, et al—have an obligation to keep their constituencies informed about how they are functioning—their problems, difficulties, and achievements.

4. From the doctor's standpoint—and this may be regarded as the selfish point of view, albeit enlightened selfishness—proper publicity is a lever for the kind of support which medicine, like all professions and social agencies, constantly needs. We have often heard that an offensive war is more easily and more successfully fought than a defensive one. Good publicity—continuous publicity—may be regarded as that offensive which will keep doctors on the victorious side in its many battles—be they against disease and death or the forces of socialized medicine.

5. An important reason for public relations development—one which doctors and others who are publicity shy are likely to forget—is that the newspaper, radio, and magazine, as important

social agencies, cannot ignore medical, scientific, and educational news. In terms of the onward march of civilization, it is the most important of all news. It is the main skein in the fabric of national and world progress. In the fulfillment of this obligation, journalists are entitled to the intelligent support of the medical world.

6. Possibly the strongest argument for active, aggressive medical public relations—and again this is from the standpoint of medicine, selfish, but enlightened—is the fact that publicity is a safeguard against misrepresentation. One reason that so many persons are sympathetic to socialized medicine may be that that side has been quick to appreciate the truth of this particular argument for propaganda and to put it to practical use.

Which brings us back to that word propaganda—indeed a tricky term. Some cynic has said that whether propaganda is good or bad depends on whether it is ours or that of the other fellow. Certainly the word means one thing for one group, and something entirely different for another. For many, it has an evil connotation. For them, it is something sinister, evil, undercover, perhaps dangerous. For others (and we, I hope, belong to this group) it is a much abused word of honorable origin and great potential. It is a necessary part of our 20th century mores. It is ours to use wisely through many media.

The agencies of propaganda are many, and each has its special use. Newspapers and radio readily come to mind. So do magazines and pamphlets. But had you thought of schools and textbooks, popular best-sellers and college courses, the church and the movies, as tools of propaganda? Where have people learned so much about socialized medicine? Not in newspaper and magazines alone. Do you know what is being said on this subject in high schools, in university courses in the social sciences, in ladies' reading circles, and in civic clubs and on lodge night? The range, scope, and possibilities of public relations, my friends, are indeed far-reaching. Good propaganda is quantitative as well as qualitative, extensive and intensive. Are you making the most of your opportunities and obligations?

Medicine is one of the oldest of the professions, but one of the youngest to see the need of organized publicity. I was interested to read that it was only last year that the Medical Association of Georgia inaugurated a public relations program—thus becoming the 22nd such society to employ a full-time public relations director and the 32nd to set up a budget specifically for public relations activities. The church ministry, another old profession, is a newcomer to the public relations field. But much progress is being made. Some of the theological seminaries are adding courses in public relations to their curricula. Possibly medical schools should do likewise. I

had a student tell me recently that he was planning to be an undertaker and that he thought journalism would be a good pre-mortician's course. We now have a combination journalism-law course. Medicine, the ministry, and the law are, of course, the classical trilogy among the professions. Two have taken formal cognizance of the place of journalism or public relations as a part of their educational preparation of novitiates. The third, your profession, seems to be toying with the idea. It may not be a bad one.

In conclusion, may I point quickly to some of the good things by way of medical public relations which I think merit commendation:

1. Some of our best books are by doctor-authors. We Georgians are familiar, of course, with Dr. Frank K. Boland's "The First Anesthetic, The Story of Crawford Long", and the tremendous amount of time and energy which Dr. Boland has exerted in behalf of Dr. Long's claim to fame as the first to use ether as an anesthesia. Incidentally, this is a good example of medical public relations at its best. We also remember the great biographies or autobiographies of Hugh Young, Harvey Cushing, the Mayo brothers, and other towering giants of medicine. Perhaps you doctors know, but I doubt whether the public does, that some of our best fiction writers have a medical background. To cite but three among contemporary best-sellers, there are Somerset Maugham, A. J. Cronin, and Frank Slaughter. If we turned back the pages of history, there would be Oliver Wendell Holmes and others of equal stature. Have you ever wondered why some of our best literature is medical in origin? (In the book trade, it is said that books by or about doctors, books about Lincoln, and books about dogs always sell well). The answer may be in the fact that physicians know life with its ailments, problems, difficulties, achievements, and moments of happiness as no other professional group can. They know life and death and all that comes between. In the language of Robert Peter Tristram Coffin in his memorable poem, "Country Doctor"—

"Through rain, through sleet, through ice, through snow,
He went where only God could go . . .

He left an old man in the dark
And blew up a tiny spark
In a young man two feet long
To carry on the dead man's song . . .

He went to the country's ends,
Not for fees, but for friends,
Came like an angel fierce and fast,
He saw men first and saw them last . . .

Our farms so lonely and spaced far
Could never have grown the nation we are
But for this man, come sun, come snow,
Who went where God alone could go."

2. Our better magazines are devoting more
(Continued on Page 466)

THE JOURNAL

OF THE
MEDICAL ASSOCIATION OF GEORGIA

EDGAR D. SHANKS, M.D., Editor
478 Peachtree Street, N. E., Atlanta, Ga.

NOVEMBER, 1950

MYSTERIOUS VIRUS DISEASE IN MEDICAL SPOTLIGHT

An especially mysterious virus condition is beginning to take the spotlight in the medical professions never-ending battle against disease. It is a condition known originally as glandular fever, more recently rechristened infectious mononucleosis, Dr. William Bolton of Chicago pointed out in the October issue of *Today's Health*, a publication of the American Medical Association.

Dr. Bolton, associate editor of the magazine, said there are "plenty of reasons why this disorder should command attention." The actual cause is believed to be a virus but is not exactly known; the way the disease spreads also is unknown.

"Its symptoms are so bizarre and-confusing that accurate identification is extremely difficult," said Dr. Bolton. "No entirely satisfactory treatment has yet been developed."

The disease is not new. It has been known since 1839, causing among other disorders a swelling of lymph glands, especially in the neck. It originally was considered a disease chiefly of children, but, like polio, it has "graduated" to other ages.

"The principal signs in the average patient are moderate fever, sore throat, cough, headache and swollen glands," said Dr. Bolton. "You could have those in the start of German measles, in the complications of an ordinary cold (with which it is frequently confused), in a mild form of influenza and a host of other disorders.

"Perhaps even more disturbing than the difficulty of diagnosis is the erratic manner in which infectious mononucleosis travels among the population. First, it is believed that many persons have it without identification ever being made. This would be possible with mild forms of infection, when the victim feels no worse than he would with a severe cold.

"Unsuspected, the virus could be passed on to a dozen friends. But to complete the confusion, not all of those friends would necessarily develop the disease. Some of them might have had it earlier, without knowing it. Others may have a natural resistance to its effects."

He pointed out its "spotty" nature—"it may develop as a small-scale epidemic in a group of children, yet attack only one child in a family of three or four." It may appear in one section of a

town and leap abruptly to some far-removed area.

"There is no rhyme or reason to its wanderings, no common medium such as water or food supplies, unsuspected human carriers who harbor the virus without showing infection, or animal carriers," he said. "It is limited to no special region or season and does not occur as a result of any changes in individual activity or body function."

Two accurate methods of identifying the disease are available, he said. The first is to inspect the white blood cells under a microscope; the second to determine whether the patient's blood serum causes a bunching of red cells taken from a sheep.

During the active course of the disease there is usually no extreme peril to life but the patient may feel worn out and unable to carry on sustained activity for weeks.

Penicillin, chloromycetin, aureomycin and human blood serum have been used in treatment and helpful results have been reported.

"Of course not everyone who feels weak and worn out after an illness can assume that he has had infectious mononucleosis," said Dr. Bolton. "But physicians are finding more and more frequently that infectious mononucleosis is the final picture after they have fitted together the pieces of this jigsaw-puzzle disease."

DIABETIC DOCTORS PROVE ONE CAN LIVE LONG AND REMAIN ACTIVE

A diabetic person can take hope from the personal experiences of physicians suffering from the same disease. Diabetic doctors—and these are estimated at about one out of every 40—have proved that by adherence to a proper regime they can conduct their normal activities and look forward to a life expectancy almost as long as that of the average physician.

This optimistic outlook was presented by Dr. Robert F. Bradley of Boston in an article in the October 7 *Journal of the American Medical Association*. Dr. Bradley, associated with the George F. Baker Clinic of the New England Deaconess Hospital, made a study of the records of 475 diabetic physicians consulting the Joslin group between 1898 and 1917.

(The Joslin group is headed by Dr. Elliott P. Joslin, clinical professor of medicine emeritus at the Harvard School of Medicine, Boston, and one of the world's outstanding specialists in diabetes).

From this study, Dr. Bradley concluded that the average diabetic physician will live almost as long as the average physician and will slightly outlive his nonmedical contemporary. He also concluded that it is worth while for a diabetic person to enter medical school if (1) he shows none of the degenerative complications of diabetes; (2) he demonstrates his ability and willingness to control his diabetes, and (3) his dura-

tion of diabetes to time of entrance is less than 15 years. Under the same conditions, a medical school need have no hesitation in receiving such a student, he said.

"Once embarked in the study of medicine, the physician in whom diabetes develops need not give up his chosen profession," he added. "He should adhere to the hygienic practices that will keep him in the best physical and mental condition, in order to prevent renal complications and postpone as long as possible the lethal effects of cardiovascular disease."

Dr. Bradley cited the results of medical advance. In the era before treatment with insulin (1898-1922), the average age at death of diabetic physicians was 56.9 years. In 1948, it was 67.3 years. The duration of diabetes in fatal cases rose from 8.5 years in the pre-insulin period to 15 years in 1948.

Diabetic coma, which at one time accounted for 35.3 per cent of all deaths in stricken physicians, has practically disappeared as a cause of death. Infections and gangrene, likewise, have almost disappeared as a cause of death.

He gave a number of examples of continued activity although diabetes has been of long standing. A 68-year-old physician who has had the disease for 41 years carries on a limited practice. A 61-year-old doctor who has had diabetes for 35 years reported he was conducting an active practice. His insulin dosage has been approximately 70 units daily since he first began taking it in 1922.

CALLS FAMILY DOCTOR GUIDE IN OLD AGE

With the problems of aging increased as a result of the ever-lengthening life span of man, the family doctor is in a position to guide older patients "into the green pastures of old age," in the opinion of a Kansas City (Mo.) surgeon.

Writing in the October 21 *Journal of the American Medical Association*, Dr. Milton Buford Casebolt said the role of the general practitioner is "that of family counselor, skilled in the handling of emergencies in the home and a kindly guide to lead his patients to the achievements of ripe, mature old age."

Dr. Casebolt served as chairman of the Section on General Practice at the annual meeting of the American Medical Association in San Francisco last June.

"More persons are reaching old age than ever before," he pointed out. "In the last 50 years a generation has been added to the life span. Prior to 1900 life expectancy was about 40 years; in 1950 the expectancy figures are approaching 70 years.

"Diseases of the aged offer a challenge to the general practitioner. He must know more about the disorders of old age and the corrective measures to cushion the aging process in the human

body.

"The process of guidance of persons into ripe old age involves rational living, mental maturing and the acceptance of anatomic and pathologic changes in the human body.

"The physician must learn more about the elderly patient who comes to his door. He must offer constructive medicine to the aged. A number of avenues are available in the approach to the problem.

"They are: (1) continued research in the diseases and disorders of the person over 50; (2) education of the geriatric patient; (3) environmental control, and (4) individual guidance.

"The medical aspects involve: (1) periodic health inventory; (2) individual guidance by the family physician; (3) correction of nutritional and glandular deficiencies, and (4) transition from active, aggressive middle age to a more quiet and serene old age, an aspect that must be well understood by the doctor and the patient. The family physician must furnish the technic and be the traffic manager or director."

He pointed out that the family doctor finds himself many times in the field of mental and nervous disorders. He sees the patient in the beginning of psychotic changes—"the personality deviations at this stage."

"Fully one third of the persons who come to my attention are suffering from anxiety complexes, worry, apprehension and fear," he said.

"There are three approaches to the problem.

"First, there is no happy solution. Resignation to the inevitable must be instilled in the mind of the sick person. Here the physician must call for courage and lean heavily on the field of religion.

"Second, the situation involves others than the person who is ill. By conferring with interested parties adjustments can be made to solve the problem.

"Third, this group of facts involves the individual for whom, by alteration of his or her mental attitudes, values can be created on which the patient can build a new emotional bridge over which to cross the chasm of despair and confusion into the sunshine of cheerfulness, hope and faith."

DOCTOR BLAMES EYES FOR 25 PER CENT OF HEADACHES

Eyes are a cause of headache in 25 per cent of patients, a Detroit ophthalmologist reported in the October 14 *Journal of the American Medical Association*.

"More patients consult medical clinics because of headaches than for any other single complaint, and for the same reason they most frequently consult an oculist," said Dr. Albert D. Ruedemann, professor of ophthalmology at Wayne University School of Medicine.

"There is probably more medicine sold for

headaches than for any other condition. Some of the large drug concerns build up tremendous fortunes by relieving the ordinary headache.

"It is the great social excuse for avoiding disagreeable engagements. While it is easy to label the patient neurasthenic (given to nervous prostration) or hysterical or just nervous, the headache may be the forerunner of a serious intracranial disease."

He said most eyes are overused, either from too much use or from use under poor working conditions.

He listed as possible victims of faulty eye functioning: The girl with a nervous breakdown, the child who is inattentive, the person in business who has a headache at noon which is relieved by lunch and then has a recurrence about 3 or 4 o'clock, the clock watcher, the student who cannot concentrate and the convalescent patient who reads in bed and has a headache.

"They may require medical exercises, surgical treatment, glasses or all three," Dr. Ruedemann said.

"Nearsighted persons do not have headache or head pain unless the nearsightedness is unequal or severe or unless they are abusing their eyes. Nearsightedness in combination with a muscle error may cause trouble.

"Farsighted persons are apt to have frontal headaches which are moderate to severe and are present almost daily in the afternoon or evening. Farsightedness sometimes is definitely associated with certain types of work. The diagnosis is easy to make and the treatment is a pair of glasses used therapeutically and not as an aid to vision.

"If there is an inequality in the amount of error in the two eyes the pain may be severer over one eye and more common as a cause of headache.

"Neck pain is more frequently due to ocular muscle imbalance than to anything else. The neck muscles function primarily to move the head so that the eyes will be in a position to see."

Dr. Ruedemann suggested that every child before entering the first grade should have his eyes tested so that he can be protected against abusing inadequate or deficient eyes.

HAVE A COLD? KEEP IT TO YOURSELF, ADVISES DOCTOR

Keep that cold to yourself by staying away from other people, advises Dr. Donald A. Dukelow of Chicago, consultant in health and fitness for the Bureau of Health Education, American Medical Association.

Dr. Dukelow, writing in the October issue of *Today's Health*, a publication of the A.M.A., pointed out that with the approach of the season of rapid temperature changes, frequent wet feet or wet clothes and increased exposure to infection in closed rooms, there is an increased risk of colds.

"Most of us take a cold in our stride and go about our work just the same," he said. "Maybe we growl a bit and feel rather nasty, but we think we can get by and it will soon wear off.

"What's wrong with this picture? In the first place, anyone who goes to the office or sends a youngster to school with a fresh cold is a public nuisance. He needlessly exposes countless people to the infectious disease that causes the loss of more man-hours than any other.

"A few of those who get his cold may develop pneumonia or have an allergy or chronic sinusitis flare-up. As far as he himself is concerned, a cold may be only a cold; yet many others will develop complications or catch a superimposed infection if he doesn't reduce his contact with them. With efficiency at a low level during an acute cold, the benefits from working are far overbalanced by the risk incurred.

"From all points of view—public health, personal health and your own public relations with your associates—the important factors in the care of a cold are to stay home, be quiet, make yourself as comfortable as possible and keep your cold to yourself. Nobody else wants it. And nobody wants you when you have a cold."

NUTRITION IS ASSOCIATED WITH WELL-BEING OF BABIES

Nutrition research has been a factor in child health and a contributor to the increase in life expectancy, according to Dr. Philip C. Jeans, professor of pediatrics in the College of Medicine, State University of Iowa, Iowa City, and member of the American Medical Association's Council on Foods and Nutrition.

(A baby born in 1900 had an expected life span of 49.2 years; one born today has an expectancy of about 68 years.)

Writing in the September *American Journal of Diseases of Children*, a publication of the American Medical Association, Dr. Jeans pointed out that nutrition knowledge is increasing at an accelerated rate and that "we cannot even guess what tomorrow will bring."

He stressed particularly the application of nutrition research to pediatrics, which deals with prevention and treatment of diseases of children.

"Our knowledge includes a better understanding of the functions of minerals, vitamins, and amino acids and an increased knowledge of the relation of food to health," he said.

"Other discoveries are imminent. For example, general availability of fat emulsions for use in parenteral (other than by mouth) feeding is just around the corner."

He said that one long-term trend of nutrition research on pediatric practice has been a more rapid growth of infants and children. He added:

"Body length is significantly greater now than it was 30 years ago, and it has become necessary to change our concept of normal growth. Rickets, scurvy and nutritional anemia, once so common, are now almost rare. Babies with marasmus (progressive wasting in emaciation) formerly were common in our hospital wards, but now they are exceptionally rare. The mortality rate among prematurely born babies has been significantly reduced.

"These and other improvements are attributable to changed concepts as to what constitutes an adequate

diet for infants and children.

"One can list many contrasts in the past 50 years. Vitamin C was unknown 35 years ago, and the feeding of orange juice to babies was not routine until some years later. A similar statement may be made for vitamin D.

"We now recognize that iron and iron-containing foods are necessary additions to the diet in early infancy and that the thiamine intake of young babies is borderline until thiamine-containing foods are added. Babies are now fed much more abundantly than formerly.

"Another factor that affects the health and welfare of babies is the diet of the mothers during pregnancy. It has been found that good nutrition of the mother makes childbearing less hazardous for both the mother and the baby."

He added that poor maternal diet is associated with complications of pregnancy and with illnesses of babies in early life.

TULAREMIA

Now that the hunting season is approaching, the Educational Committee of the Illinois State Medical Society, in a *Health Talk*, cautions the public, hunters and housewives particularly, to be alert to the dangers of tularemia or rabbit fever.

The infection is found in small wild animals, such as rabbits, hares, field mice, opossums, squirrels, coyotes and skunks. It is acquired by man either by direct contact with sick animals or by bites of insects which have fed on them.

Tularemia takes its name from Tulare County in California where the causative germs, *Bacterium tularensis*, was first identified in ground squirrels.

Hunters, trappers, butchers or housewives who skin and clean infected rabbits acquire the disease through some abrasion or even through apparently unbroken skin. Eating improperly cooked infected meat or drinking contaminated water may also be channels of infection.

The incubation period is from three to five days. Headache, chills and fever are the first manifestations. Weakness, loss of weight, prostration, backache, joint pains and drenching sweats mark the acute stage, which lasts two or three weeks, after which the fever drops gradually. The fever is always high, 104 to 105 degrees. Because of the debilitating effect of the disease, convalescence usually takes two to three months.

If the infection occurs through a cut or abrasion, an ulcer develops at the site, and the lymphatic glands in the area become swollen. In other instances, the glands may swell without the appearance of an ulcer. Some cases resemble typhoid fever or pneumonia. If the infection occurs about the eyes, the conjunctiva, the delicate membrane that lines the eyelids, is likely to show ulcers. If infected meat is eaten, ulcers may develop in the mouth or the pharynx.

Tularemia can be prevented by following a few simple precautions, particularly in the dressing of game, especially wild rabbits. Hunters and housewives should use rubber gloves. By nature, rabbits are frisky. Actually then hunters should avoid shooting rabbits that are inactive or appear ill. Rabbits found dead should not be handled and all rabbits whose internal organs are marked by small white spots should be destroyed. Especially important is the thorough cooking of the meat of wild rabbits.

In the preparation for cooking, the hands, after touching the fur or raw meat, should be kept away from the face, mouth and eyes, and all fur, refuse and contaminated paper should be burned. The rubber gloves should be sterilized in boiling water and the

hands washed thoroughly with soap and hot water. A disinfectant, such as alcohol, applied to the hands after cleansing, is valuable.

All persons should take special precautions against the bites of ticks and fleas, but particularly when working in infected areas.

Anyone manifesting the symptoms of tularemia should go to bed immediately and call a doctor, because of the seriousness of the disease. It must be remembered that one out of every twenty cases proves fatal. If one recovers from an attack, however, a permanent immunity is established.

Under the supervision of a physician, streptomycin has been found beneficial in tularemia, particularly in minimizing the suffering and the weakening fever.

ATHEROSCLEROSIS

Public Health Service grants totaling \$230,773 for research in four non-federal institutions on atherosclerosis—a form of hardening of the arteries which leads to heart attacks—were announced recently by the Federal Security Administrator.

The grants were made by the National Heart Institute following recommendations of the National Advisory Heart Council and approved by Surgeon General Leonard A. Scheele of the Public Health Service.

"Atherosclerosis is a major disease of our times," Dr. Leonard A. Scheele, Surgeon General, said in commenting upon the grants. "Its consequences are responsible for over 40 per cent of the three-quarters of a million deaths in the United States each year from cardiovascular diseases, and it causes much suffering and disability.

"It is a major threat not only to older persons but also to many in the prime of life because it is not an accompaniment merely of old age but can affect younger age groups.

"The intensified research effort against atherosclerosis represented by these grants will permit the exploration of promising new research leads and is aimed at providing definitive answers as to their possibilities. The studies have potentialities for the development of tests, simple and non-hazardous, for early case-finding in atherosclerosis as well as for the eventual development of preventive or curative treatments."

RARE TYPE OF CANCER MAY FOLLOW NAIL INJURY

A rare type of cancer arising in the finger or toe nails is reported by a Peoria (Ill.) doctor in the September 2 *Journal of the American Medical Association*.

Appearance of a sore between the cuticle and the nail is a distinguishing characteristic of this cancer, Dr. Lyle W. Russell says. Symptoms such as swelling and moderate pain easily may lead to delayed recognition of the tumor and confusion with other conditions, he points out.

The cancer may appear as a small, yellowish crater which fails to heal and if neglected may invade the bone, according to Dr. Russell. Amputation of the finger or toe is the recommended treatment and the outlook for cure usually is good unless spread of the cancer to another part of the body has occurred prior to the surgery.

Injury appears to be a possible inciting cause in the formation of this type of cancer, Dr. Russell says. In 11 of 20 cases reported, a deep puncture wound between the nail and nail bed or other injury to this area preceded the diagnosis of cancer by six months to 18 years.

The Medical Association of Georgia will hold its 1951 annual session in Augusta. The dates are April 17, 18, 19 and 20. Bon Air Hotel will be headquarters, with Partridge Inn participating. Please make your reservations now.

DOCTORS AND THE PUBLIC

(Continued from Page 461)

space to your field. *Time*, I think, does a good job with its section on medicine. *Readers Digest*—in spite of some doctors' cryptic and critical comments—has carried many excellent articles and has a point of view which is admirable. *Look* magazine, with its illustrated feature on the American Medical Association, and its current article by Margaret Mead on psychoanalysis, has shown enterprise and discrimination in its approach to health subjects. *Atlantic Monthly*, *Life*, *Saturday Evening Post*, and *Ladies' Home Journal* come to mind, and in the case of the last mentioned, the work of Edward Bok in the realization of pure food and drug laws is indeed a milestone of great importance.

3. All over the country, those newspapers which are financially able to do so are adding reporters and special writers to handle hospitals, medicine, science, and related subjects. Our own *Atlanta Journal* and *Constitution* have pioneered in this form of journalistic progress and have won sectional and national praise for their achievements in this realm.

4. Radio, through local and network programs, is giving more time and better talent to programs that relate to medicine and health. I remember that a Peabody winner in 1942 was "Our Hidden Enemy—Venereal Disease", Radio Station KOAC, Corvallis, Oregon, prepared by Dr. Charles Baker for the University of Kentucky.

5. Television, right here in Atlanta, has demonstrated its usefulness in revealing operation technics. I was privileged, as were some of you, to see those marvelous demonstrations at the Municipal Auditorium, and both the potentialities and actualities of those telecasts were impressive and far-reaching indeed.

There is much more than could be said about what medicine has already accomplished by way of good public relations, and also about what is yet to be done. Possibly I have said enough for you to carry both themes forward in your own thinking. To close, I turn again to Sir William Osler—for whom I have great admiration, however much I may disagree with his statement which I used as the text for these remarks. Sir William once said:

"Always note and record the unusual . . . communicate or publish . . . anything that is striking or new."

Did you note the key words in that injunction? The *unusual* . . . *communicate* . . . *publish* . . . *striking* . . . *new*.

How like the classical definition of news which is in every primer of journalism!

If a dog bites a man, it is not news, but if a man bites a dog, news it is.

The *unusual* . . . the *striking* . . . the *new*.

Perhaps medicine and journalism are not so

far apart after all. Certainly both are concerned with human and social betterment. And, certainly, a working alliance between the two is possible without in any way jeopardizing the Hippocratic oath. Dr. Osler admonished: "Remember how much you do not know". Public relations is a new field. There is much yet to be learned. But progress is being made, and medicine in general, and you of the Medical Association of Georgia, in particular, are to be congratulated on what you are accomplishing in this vital area.

MEDICAL EDUCATOR PRAISES PRESS;
CALLS FOR COOPERATION OF DOCTORS

The reporting of medical news in general is of a high order and physicians are called upon to cooperate wholeheartedly with the press, within the limits of propriety, in an article in the September 30 *Journal of the American Medical Association*.

Particular praise was given to "eminent, experienced science writers in the newspaper and magazine field" by Dr. Russell S. Boles of Philadelphia, educator and specialist in internal medicine, who prepared the article.

"These men and women are an honor to their profession and deserve the utmost cooperation of members of the medical profession in providing suitable medical news to the public," Dr. Boles said. "They are not to be confused with the writer who frequently contributes news more for its sensationalism than for its scientific value."

"The ethical science writer has no desire to report medical news that may later prove a boomerang. He judges the value of news by considering its source, and through long experience he learns to recognize reliable sources. He also learns to sense the publicity seeker, whether an individual or an institution."

He lauded the National Association of Science Writers for "its commendable efforts in promoting and writing of medical science news," saying: "Each member of this association is proud of his reputation and endeavors to enhance it in the eyes of the medical profession."

"Today, the physician may feel safe in the confidence of the reporter and can feel assured that interviews and releases will be reported accurately; also that care will be taken to include reference to any qualifications or limitations he has expressed concerning his investigations," he added.

Dr. Boles cautioned both the medical profession and the press to go slow in publicizing the preliminary results of scientific experiments which are being conducted in all fields of medicine. He pointed out that it is proper for a physician to report to his colleagues by appropriate means that some new treatment or method of diagnosis has appeared to be successful and merits further investigation. He added, however, that other researchers may discover it may be harmful or even endanger life.

"Disillusionment follows in its wake, with the result that the premature publicity provides nothing but disappointment to, and a loss of confidence by, the anxious reader," he said.

"One who has had considerable experience in research is slow to publish the results of his work. The true scientist demands absolutely accurate and well controlled experiments on a reasonably large scale and over a long period of time before he draws any conclusions. The enthusiast, while honest, is apt to be impatient and jump to conclusions, and it is from him that much unsound medical news emanates."

News of the proper character, he said, demonstrates to the public the remarkable accomplishments in the field of medicine under a system of free enterprise and opportunity, and provides an increasing sense of security concerning health.

MEDICAL PUBLIC RELATIONS CONFERENCE

Terming the county "the key area in which the main public relations job of the medical profession must be done," Dr. George F. Lull, Secretary and General Manager of the American Medical Association, today unveiled plans for the Third Annual Medical Public Relations Conference.

The 1950 Conference is set for December 3 and 4 in Cleveland—just prior to the Clinical Session of the American Medical Association. It will concentrate on county society programs aimed at increasing community goodwill toward the medical profession.

In attendance at the two-day session will be some 300 M.D. chairmen of state and county medical society public relations committees, society executive secretaries and public relations directors, officers of the American Medical Association Woman's Auxiliary and key representatives of allied health organizations.

The program schedule calls for four work sessions, two noon sessions and an evening session. All activities will be at the Hotel Statler.

The opening work session on Sunday, December 3, will take up the important "groundwork for a successful public relations program." On the docket will be discussions on organizing public relations committees, financing the program, techniques for finding out what public relations work is needed, program planning and ways to build support among society members.

Work sessions on Monday, December 4, will include a timely summary of "county societies and the legislative scene," a series of brief reports on specific worthwhile county public relations activities, and an open forum period during which conferees will divide into three groups to swap ideas with representatives from similar-sized communities.

Appearing at the "legislative" session will be Dr. Dwight H. Murray, A.M.A. Trustee and Chairman of the Committee on Legislation and Dr. Joseph S. Lawrence, Director of A.M.A. Washington office.

The "activities with a purpose," session will show how county public relations projects have improved community feelings towards doctors. Among the projects to be discussed are "community-minded doctors," "a doctor for every family," "working with other professions," and "the doctor and civilian defense," and "let the doctor speak."

On Monday afternoon three discussion groups will be formed to take up medical public relations problems in small communities, medium-sized communities and metropolitan areas. Each group will attempt to work out basic ideas that will be useful to other county societies embarking on public relations campaigns.

Sunday noon, Dr. John W. Cline, president-elect of the American Medical Association, will keynote the conference with an address on "Serve Your Nation Through Better Public Relations." Speaker at the Monday noon session will be R. W. Mills, secretary of the Fond du Lac, Wisconsin, Association of Commerce. His topic is: "The American Way of Life."

Mid-point of the idea-packed Public Relations Conference will be the annual conference dinner Sunday evening. Sharing the speaker's platform will be A.M.A. President, Dr. Elmer L. Henderson, and a nationally prominent man outside the medical field. In addition, the program will feature Cartoonist Marvin Bradley, one of the creators of the comic strip, "Rex Morgan, M.D."

As a supplement to the regular conference sessions, two special visual aid demonstrations have been scheduled. One will be a screening of the new Louis de Rochemont film, "M.D.—the U. S. Doctor." The other will be a demonstration of a television package show being produced by the Bureau of Health Education for use by state and county societies.

The Medical Association of Georgia will hold its next annual session at the Bon Air Hotel, Augusta, April 17-20, 1951.

IMPORTANT NOTICE

The Committee on Constitution and By-Laws of the Medical Association of Georgia will hold a meeting at the Hotel Dempsey, Macon, Georgia on January 10, 1951 at two o'clock in the afternoon. Members of the Association are cordially invited to present their views to the committee either in person or by letter.

ALLEN H. BUNCE, Atlanta, Chairman
C. H. RICHARDSON, SR., Macon
MARION C. PRUITT, Atlanta
W. F. REAVIS, Waycross
JOHN A. DUNAWAY, Atlanta, Attorney
for the Association
A. M. PHILLIPS, Macon, President
EDGAR D. SHANKS, Atlanta, Secty-Treas.

NEWS ITEMS

Avera recently honored its founder, Dr. Alexander Avera, with the dedication of a monument. Dr. Avera was born in Jefferson County, Georgia, October 3, 1830. He graduated from Medical College of the State of South Carolina, Charleston, in 1858 and finished Oglethorpe College at Savannah in 1850. He organized a company of soldiers and enlisted in the Confederate Army and served in the War Between the States with honor. At the close of the war, he returned to Jefferson County and gave land for the entire site of the town of Avera. He served as postmaster and station agent.

* * *

The Baldwin County Medical Society, Milledgeville, held its monthly meeting August 7, at which time Dr. Dawson Allen, of Allen's Invalid Home, Milledgeville, gave a very interesting discussion on "The Treatment of Alcoholism with Reference to Antabuse".

The September meeting was held with a very interesting talk on "Bronchiogenic Carcinoma", with particular reference to the x-ray findings and differential diagnosis presented by Dr. Stephen W. Brown, Augusta.

Members of the Baldwin County Medical Society were hosts at the Milledgeville Country Club, October 3, when they entertained with the annual ladies' night party in honor of their wives. Dr. Charles B. Fulghum, Milledgeville, served as master of ceremonies. Taking part on the program were members of the Milledgeville State Hospital medical staff who are natives of other countries. Dr. Robert D. Waller, secretary.

* * *

Dr. Robert L. Bennett, Warm Springs, director of physical medicine at the Warm Springs Foundation, has been named president-elect of the American Congress of Physical Medicine.

* * *

The Berry Clinic, 1010 West Peachtree Street, N. W., Atlanta, announces the association of Dr. William Bradley Martin. Practice limited to cardiovascular diseases.

* * *

The Phoebe Putney Memorial Hospital, Albany, is playing an important role in the state's fight against polio, according to Dr. Tully T. Blalock, Atlanta, member of the Medical Advisory Board of the Georgia Chapter of the National Foundation for Infantile Paralysis. The medical program serving these patients has been made possible by the Georgia Chapter of the National Foundation for Infantile Paralysis, financed exclusively by the March of Dimes.

* * *

Dr. Frank Kells Boland, Atlanta surgeon and author, was recently guest speaker in Jefferson at a day's celebration sponsored by Jackson County chapters of the United Daughters of the Confederacy, to give due recognition to Dr. Crawford W. Long, the man who discovered ether. An autograph party was held in the High School Library. Dr. Boland reviewed his book, "The First Anesthetic, the Story of Crawford Long" which gives proof of Dr. Long's discovery of anesthesia. Dr. Boland was honored at luncheon. In

the afternoon the Commerce chapter of the UDC sponsored a program and again presented Dr. Boland. A display of pictures related to the life of Crawford Long were exhibited.

Dr. Boland was also recently honored at a luncheon given by the Woman's Auxiliary to the Floyd County Medical Society, Rome.

* * *

Dr. Nathaniel J. Breckir, New York City, faculty member of the New York University College of Medicine, gave a series of lecture-seminars at the Veterans Administration Hospital (Lenwood), Augusta, during the week of October 2. Dr. Breckir came to the hospital as a part of this training program. His subject was "Group Psychotherapy".

* * *

Dr. James W. Chambers, LaGrange, will head a group of LaGrange doctors who will serve the people of Harris County at the Hamilton Clinic, Hamilton, each Monday, Wednesday and Friday.

* * *

Dr. Harley Cluxton, Jr., Savannah, has accepted the position as director of medical research for the Armour Laboratories in Chicago. He received his medical degree from the Johns Hopkins University School of Medicine, Baltimore, Md., in 1941. Following the completion of his internship at the Baltimore City Hospital, he entered the Mayo Clinic, Rochester, Minn., as a fellow in internal medicine in 1942 and remained there until 1944 at which time he entered the Armed Services. Following the completion of his medical field service course at Carlisle, Pa., he was stationed at the Army and Navy General Hospital, Hot Springs, Ark. Major Cluxton received the Unit Citation award and also the Army Commendation ribbon for meritorious service. After completing his tour of duty in the Army in July, 1947, he went back to the Mayo Clinic where he remained until he returned to Savannah in February, 1949, to open his office for the practice of internal medicine in association with his twin brother, Dr. Hayes Cluxton.

* * *

The Georgia Department of Public Health, Atlanta, announces that more than 20 foreign doctors studied Georgia's health work in connection with the department during the past summer. Venereal disease control and the hospital program received most of the foreign physicians' attention. The physicians were representatives from Central and South America, Germany, China, Norway and South Africa.

* * *

Dr. William J. Dieckmann, Chicago, professor and obstetrician in chief at the University of Chicago, The School of Medicine and the Chicago Lying-In Hospital, delivered the second annual E. C. Davis memorial lecture before the Fulton County Medical Society at the Academy of Medicine, Atlanta, October 5. The lecture honored Dr. Edward Campbell Davis, one of the founders of what is now Crawford W. Long Memorial Hospital, who died in 1931.

* * *

Dr. B. V. Elmore, Rome, Floyd County Health Commissioner, has been officially commissioned as registrar of vital statistics for entire Floyd County, according to an announcement from the Georgia Department of Public Health Director, Dr. T. F. Sellers, Atlanta.

* * *

Dr. John B. Fitts, Atlanta, announces the association of Dr. Spence McClelland, 902 Medical Arts Building, Atlanta, in the practice of gastroenterology and internal medicine.

* * *

Dr. W. Devereaux Jarratt, Macon, has enrolled at Northwestern University Medical School, Chicago, for a three-year course in ophthalmology. Dr. Jarratt is a native of Macon, and graduated from Medical College of Georgia, Augusta, and served in the U. S. Army for

four years, being discharged with the rank of lieutenant colonel.

* * *

Dr. Frank F. Kanthak, Atlanta, recently addressed the Central District Dental Society in Macon. Dr. Kanthak is a member of the faculty of the Emory University School of Dentistry and School of Medicine and is associated with Dr. William G. Hamm in plastic and reconstructive surgery. In addition to his teaching duties, he is a consultant in plastic surgery at the VA Hospital, Chamblee, and at the Olivet General Hospital, Augusta.

* * *

Dr. Robert C. Major, Augusta, professor of thoracic surgery for the Medical College of Georgia, has been called to active duty with the U. S. Army, at Denver, Colo. He is known throughout the nation for his work in thoracic surgery and will hold the rank of lieutenant colonel in the Army.

* * *

Dr. John M. Martin, Augusta, has been appointed by the Federal Bureau of Prisons as physician for federal prisoners who might be inmates of the Richmond County jail.

* * *

Dr. Walter Martin, Augusta, who has been with the Richmond County Public Health Department for the past year, has opened an office in Thomson for the practice of general medicine. Dr. Martin is a native of Shellman, and graduated from the University of Georgia Medical School, Augusta, in 1941. He served in the European theatre with the U. S. Army during World War II and was discharged with the rank of captain.

* * *

Dr. J. H. Milford, Hartwell, announces the opening of the Milford Clinic in a modern brick building on East Franklin Street, Hartwell. The clinic contains two examining rooms, two reception rooms—for white and colored—a laboratory and office, and is well arranged and modern in every respect.

* * *

Dr. W. E. Hamm, Atlanta, recently addressed the the Summerville-Trion Rotary Club. Dr. Hamm used a series of slides showing the before and after effects of plastic surgery. He discussed plastic surgery in cases of war injuries.

* * *

Dr. R. R. McCollum, Jr., Kingsland, entertained the members of the Ware County Medical Society and their wives at the Crooked River Club, October 4. The sea food supper was a banquet long to be remembered. Dr. W. A. Hendry, Blackshear, president of the society, presided over the brief business session when reports were made by Dr. Leo Smith, Waycross, secretary. Doctors and their wives attending the annual event were: Dr. and Mrs. Braswell Collins, Dr. and Mrs. H. T. Adkins, Dr. and Mrs. Floyd Davis, Dr. and Mrs. W. M. Flanagan, Dr. and Mrs. T. J. Ferrell, Dr. and Mrs. Joseph R. Gay, Dr. and Mrs. A. M. Knight, Jr., Dr. and Mrs. Clayton Massey, Dr. B. H. Minchew, Dr. and Mrs. Harold Muecke, Dr. and Mrs. W. L. Pomeroy, Dr. and Mrs. Lovick W. Pierce, Dr. and Mrs. W. F. Reavis, Dr. and Mrs. Ansley Seaman, Dr. Leo Smith, Dr. and Mrs. M. D. Clayton, Jr., Mrs. W. C. Hafford, all of Waycross, Dr. W. A. Hendry, Dr. Katherine Hendry, both of Blackshear, and Dr. and Mrs. R. C. McCollum, Jr., Kingsland.

* * *

Dr. Robert C. McGahee, Augusta, was guest speaker at a recent meeting of the Woman's Auxiliary to the Richmond County Medical Society at the Bon Air Hotel, Augusta. Dr. McGahee's subject was "Medical Ethics". He emphasized the part played by the physician's wife.

* * *

Dr. Harold W. Muecke, Waycross pediatrician, recently presented a paper, "The Pediatric Approach to

Patients and Parents' before the Ware County Medical Society.

* * *

The Medical College of Georgia, Augusta, recently conducted a seminar on cytology and the early diagnosis of cancer. Dr. H. E. Nieburgs, director of the department of clinical cytology of the Medical College led two hours of discussion. He was followed by Mrs. Ruth M. Graham, Vincent Memorial Hospital, Boston, and Dr. H. J. Wespi, chief of obstetrics and gynecology, Canton Hospital, Aarau, Switzerland.

Other lecturers who appeared on the program were: Dr. Ingrid Stergus, Rome, Battey State Hospital, and Lt. Col. Joe M. Blumberg, Walter Reed Hospital, Washington, D. C.; Dr. S. W. Brown, Dr. J. K. Cline, chief of the cancer research department of the University of Alabama and Dr. John E. Dunn, of the U. S. Public Health Service, Bethesda, Md.

* * *

Dr. William Rawlings, Sandersville physician and surgeon, is doing postgraduate work in surgery at the University of Pennsylvania School of Medicine, Philadelphia, for a period of eight months. He will continue his practice in Sandersville following completion of his graduate studies.

* * *

The Richmond County Medical Society, Augusta, at its recent monthly meeting, heard three doctors from the Veterans Administration. The program was a symposium on "Convulsive Diseases." Dr. Julian Kaufman, chief of the medical service discussed "Medical Aspects of These Diseases." Dr. Henry Schneiderman, chief of the neurologic service, spoke on "Neurologic Aspects and Treatments." Dr. Clarence E. Jump, chief of the continued treatment service, discussed "Psychiatric Aspects."

* * *

Dr. Henry E. Steadman, Hapeville, recently returned from a tour of South America. He traveled by steamer to Buenos Aires, Argentina; stopped at Port of Spain, Trinidad; Rio de Janeiro, Santos, Sao Paulo, Brazil; and Montevideo, Uruguay. The return trip, via Pan American Airways, was over the Andes to Santiago, Chile; Lima, Peru; Panama and Miami.

Dr. Steadman gave a paper on a surgical seminar conducted by the College of International College of Surgeons in connection with the Seventh Biennial Assembly held at Buenos Aires, Argentina. The paper "Endometrioma of Sigmoid Producing Obstruction" appeared in the September issue of the *Journal of International College of Surgeons*. An abstract in the form of "Summary and Conclusion" of the original paper is given as follows:

"A case of sigmoid obstruction due to endometrial tissue, in the absence of generative organ or other ectopic endometrial tissue transplants, is presented.

"Differential diagnosis of endometriosis and carcinoma of the sigmoid are given.

"The coexistence of carcinoma and endometriosis must be considered a possibility.

"In cases of complete obstruction of sigmoid, surgical intervention to deflate the distended bowel is of first importance.

"Diagnosis especially in the absence of multiple endometrial 'transplants' depends on the microscopic findings.

"Generally speaking, a single endometrioma of the lower bowel with obstruction should be resected. This is especially true in cases relatively free of generative organ pathology in which the patients desire to have children."

* * *

Dr. M. A. Strickland, Atlanta, announces the opening of his offices at 106 North East Point Street, East Point, for general practice and surgery. He holds a Bachelor of Science degree from the University of Georgia, Masters and Doctor of Philosophy from New

York University and Medical degree from Emory University School of Medicine, Atlanta. Dr. Strickland served an internship at Misericordia Hospital in New York City and for one year, he was at the U. S. Marine Hospital at Staten Island, New York. For a short time, he was resident at Lawson VA Hospital, Chamblee.

* * *

Dr. W. Edward Storey, Columbus, attended the second annual meeting of the Georgia Heart Association recently held in Atlanta.

* * *

Dr. T. O. Vinson, Decatur, commissioner of health for DeKalb County, was guest speaker at a recent dinner meeting of the Lithonia Exchange Club. During his term as health officer for DeKalb, Dr. Vinson has accomplished much to improve the health standards of the residents of this industrial area.

* * *

The annual scientific meeting of the Georgia Urological Association and the Georgia Chapter of the American College of Surgeons including the Trauma and Cancer Committees will be held at the Hotel General Oglethorpe, Savannah, December 1. Appearing on the program will be Dr. Henry Cave, New York City, president American College of Surgeons; Dr. Alfred Blalock, Baltimore, professor of surgery of Johns Hopkins University School of Medicine; Dr. Frederick E. B. Foley, Minneapolis, clinical associate professor of urology, University of Minnesota Medical School; and Dr. Carl Badgely, Ann Arbor, professor of orthopedic surgery at the University of Michigan Medical School. All members of the Medical Association are invited to attend. There will be a small registration fee which will cover the cost of lunch, cocktails and dinner. Dr. Reese C. Coleman, Jr., Atlanta, secretary.

* * *

Dr. Virgil P. Sydenstricker, Augusta, recently returned from Geneva, Switzerland; London, England, and Dublin, Ireland. His visit abroad was for the purpose of attending conferences of the world health organization, of which Dr. Sydenstricker is a consultant. The subjects discussed at these conferences were related to nutrition in industry, subjects on which Dr. Sydenstricker is internationally recognized as an authority.

* * *

Dr. John Venable, Griffin, director of the Spalding County Health Department, announces the expansion of the department's clinic services. Many of the services which have been offered only once a week, are now being offered three times a week.

* * *

The Georgia Association of Local Public Health Physicians was recently organized in Macon. Officers were elected, a constitution and by-laws were adopted. Dr. M. E. Winchester, Brunswick, was elected president. Dr. C. A. Henderson, Savannah, was named vice-president and Dr. D. M. Wolfe, Albany, was elected secretary-treasurer. There are 21 public health physicians throughout the state who are eligible for membership in the association, whose purpose is to determine policies of the group and to consider any policy of any public or private agency dealing with any matter pertaining to human health in any city, county, district, or the state. The executive committee is composed of the three above named officers and Dr. R. Frank Cary, Macon; Dr. J. D. Stillwell, Thomasville; Dr. T. O. Vinson, Decatur; and Dr. Abe J. Davis, Augusta. Dr. T. O. Vinson, Decatur, was named chairman of a committee on local public health work, and with him will serve: Dr. D. M. Wolfe, Albany; Dr. Ernest Thompson, Monroe; Dr. J. H. Venable, Griffin; and Dr. J. D. Stillwell, Thomasville. Committee on Tuberculosis: Dr. C. A. Henderson, Savannah, chairman; Dr. H. T. Adkins, Waycross; Dr. W. J.

Peebles, Columbus, and Dr. Abe J. Davis, Augusta. Plans call for the association to meet once a year, or as often as the executive committee deems it necessary. Any assistant public health officer connected with a local health department is eligible for membership, but no county will be allowed to have more than two votes.

* * *

The Fulton County Medical Society held its semi-monthly meeting at the Academy of Medicine, Atlanta, October 19. Dr. Carter Davis was moderator. Scientific program: "A New Concept in the Treatment of Hirschsprung's Disease", Dr. Charles E. Holloway; "Transthoracic Nephrectomy for Kidney Tumors", Dr. Harold P. McDonald.

* * *

The Georgia Medical Society held its regular meeting at 612 Drayton Street, Savannah, October 10. "Kidney Function in Disease", with motion pictures, was presented by Dr. Peter Scardino. Dr. Sam Youngblood, Jr., secretary.

* * *

The Second District Medical Society held its fall meeting, October 12, at Radium Springs, Albany.

The meeting was opened by the president, Dr. Robert M. Joiner, Moultrie. The minutes of the previous meeting were read and approved.

Dr. A. M. Phillips, Macon, president of the Medical Association of Georgia was introduced. He made a short talk and introduced Dr. Stephen T. Brown, Atlanta, chairman of the Public Relations Committee of the Medical Association of Georgia. Dr. Brown made a talk concerning the importance of Public Relations and stressed the importance of the individual doctor's part in the Public Relations program.

Dr. M. W. Williams, Camilla, announced a General Practice Seminar to be held at the Mitchell County Hospital, November 1, 1950.

Dr. C. K. Wall, Thomasville, moved that the Second District Medical Society meetings be held the first Thursday of April and October in order to avoid conflicts with the Florida Second District Medical Society and the State Medical meeting; this motion being seconded by Dr. Howard Cheshire, Thomasville, and carried unanimously.

A committee was appointed to select a meeting place for the April meeting and to appoint doctors to present the program.

Scientific program: Dr. Robert Greenblatt, Augusta, of the Department of Endocrinology of the Medical College of Georgia discussed "Experience with ACTH and Cortisone in Various Endocrine and Non-Endocrine Conditions". His discussion was divided into two portions. The first part was on the "Physiology of the Adrenal" and the second part was case histories in which ACTH and Cortisone had been used. The discussion of Dr. Greenblatt's paper was opened by Dr. Henry Poer of Atlanta. Dr. George Dillinger of Thomasville read a most enlightening paper, "The Problem of Gout". Dr. Mack Sutton of Albany presented a "Kodachrome Clinic—Pediatric Cases". His slides and discussion of the cases were outstanding. "Cervical Smear as a Routine Office Procedure" was the title of the paper read by Dr. Charles Bellville of Bainbridge. Dr. Bellville stressed the importance of this procedure in order to detect early cancer of the cervix.

Following the scientific program the committee announced that the next meeting would be held on the first Thursday in April, 1951 at Moultrie. Dr. Walter Thwaite of Quitman was selected to present a paper on Medicine. Dr. John W. McLeod, Jr., of Moultrie was selected to present a paper on Surgery and Dr. Mervin Wine of Thomasville to present a paper on Allergy.

Adjournment. The members of the Dougherty County Medical Society entertained the members and visitors

of the Second District Medical Society with a social hour and buffet supper. Frank A. Little, M.D., secretary.

* * *

Dr. Thomas A. McGoldrick, Jr., Savannah, held clinics and gave a lecture at the Veterans Administration Hospital, Dublin, August 30, as a feature of the hospital's postgraduate program for its medical staff. The subject of his address was "The Inherent Instability of the Spleen." Members of the Laurens County Medical Society were invited guests for the occasion.

* * *

Dr. Peter L. Scardino, Savannah, held a clinic and lectured on "The Management of Renal and Ureteral Calculi" at the Veterans Administration Hospital, Dublin, October 25. His presentation was one of the regularly scheduled features of the postgraduate teaching program provided by the Veterans Administration for the medical staff of the Dublin Hospital.

The members of the Laurens County Medical Society were invited guests for the occasion.

OBITUARY

Dr. James Henry McDuffie, Jr., aged 62, leading Columbus physician, died September 27, 1950, at City Hospital, Columbus. Dr. McDuffie was born in Keyser, N. C., a son of the late Dr. J. H. McDuffie, Sr. and Sarah Helen Page McDuffie. He graduated from the University of Pennsylvania School of Medicine, Philadelphia, Pa., in 1916. He served his internship at the Lenox Hill Hospital and the Lying-In Hospital in New York City. During his two years service in the Medical Corps of the Army during World War I, he was in command of an Army hospital in southern France. He had been a practicing physician in Columbus since the close of World War I. During his practice in Columbus, Dr. McDuffie worked untiringly for the advancement of medicine, and was a leader in the movement to secure the necessary funds to build the new wing to the City Hospital, where he served for several years as chief of staff. When the Blue Cross insurance plan was broached for Columbus he took a leading role in its successful establishment. He was a member of the Muscogee County Medical Society, having served it as president. He was recently presented a life membership in the society in recognition of his long membership in and service to the group. He was also a member of the Medical Association of Georgia, and a fellow of the American Medical Association. Survivors include his wife, Mrs. Lucile Peacock McDuffie; a son, James H. McDuffie, III, Morrison, Ill.; three daughters, Mrs. William Sylvan, New York City; Mrs. B. H. Hardaway, III, and Mrs. Lee Redmond, both of Columbus; a sister, a brother, and six grandchildren. Funeral services were held at the First Presbyterian Church, with Dr. John E. Richards, pastor, officiating. Burial was in the Parkhill Cemetery, Columbus.

NEW BOOKS

The First Anesthetic. The Story of Crawford Long: Frank Kells Boland, M.D., Atlanta, Professor of Clinical Surgery, Emory University School of Medicine, and President, Crawford W. Long Memorial Association. Athens, Georgia: The University of Georgia Press, 1950.

This documentary narrative is an attempt to prove the priority of the use of ether for surgical anesthesia by Dr. Crawford W. Long.

No book, nor any statement for that matter, can be entirely separated from the character of the author and to one who knows how conscientiously the author has worked on his manuscript, sifting out chaff and diligently winnowing the true from the false, this little book takes on the character of a testament on the discovery of ether as an anesthetic agent.

It is difficult to present documentary evidence in

an interesting manner but "The First Anesthetic" accomplishes this feat. The book can be read in one and one-half hours and should be read by every one who is interested in the history of medicine or who wishes to have a knowledge of one of the greatest controversies that has ever occurred in medical history. It is a must for every doctor.

The author, who is well known to me, has made careful and conscientious study of Crawford Long's documentary evidence and has included in his book photostatic copies of letters and other testimonials presented in proof of his claim to be the first discoverer and user of ether as a surgical anesthetic.

After reviewing the evidence presented, the reader can not escape the belief that Crawford Long was the first to use ether for surgical anesthesia and that he used it after deliberately planning its use and calculating its effect.

JOHN W. TURNER, M.D.

* * *

Pathologic Physiology: Mechanisms of Disease: Edited by William A. Sodeman, M.D., F.A.C.P. The Wm. Henderson Professor of the Prevention of Tropical and Semi-Tropical Diseases, Tulane University of Louisiana School of Medicine; Senior Visiting Physician, Charity Hospital of Louisiana; Consultant in Medicine, U. S. Marine Hospital at New Orleans. 808 pages with 146 figures and 30 tables. Philadelphia and London: W. B. Saunders Company, 1950. Price \$11.50.

With the able assistance of numerous contributors, all of whom are distinguished in their fields of endeavor, Dr. Sodeman has produced a most creditable book. Its size is right; its material is right. It should be an addition to any physician's library.

* * *

Thoracic Surgery: by Richard H. Sweet, M.D., Associate Clinical Professor Surgery, Harvard University Medical School, Illustrations by: Jorge Rodriguez Arroyo, M.D., Assistant in Surgical Therapeutics, University of Mexico Medical School. 345 pages with 155 illustrations. Philadelphia and London: W. B. Saunders Company, 1950. Price \$10.00.

In recent years thoracic surgery has become almost commonplace in the large medical centers, but perhaps is not so well appreciated and practiced in the small medical centers. This book is rich in material and will be found most useful in all medical centers.

* * *

The Pathology of Internal Diseases. By William Boyd, M.D., Dipl. Psych., M.R.C.P. (Edin.), F.R.C.P. (Lond.), F.R.C.S. (Canada), LL.D. (Sask.), D.Sc. (Man.), M.D. (Oslo), F.R.S. (Canada), Professor of Pathology and Bacteriology in the University of Toronto, Toronto. Cloth. Pp. 866. Fifth edition, thoroughly revised, with 391 illustrations and eleven colored plates. Lea & Febiger, Philadelphia, 1950.

Dr. Boyd, long a distinguished pathologist, has again produced a book which should be most helpful to those seeking more knowledge regarding the pathology of internal diseases.

* * *

Eyes and Industry: Formerly Industrial Ophthalmology. By Hedwig S. Kuhn, M.D., Industrial Ophthalmologist, Hammond, Indiana. Second edition. Cloth. \$8.50. Pp. 378, with 151 text illustrations, including three color plates. The C. V. Mosby Company, St. Louis, 1950.

American industry being what it is, and renewed efforts being made to protect at all times the workers' eyes, this book will be found useful in the prophylaxis and treatment of many patients with eye troubles.

NEW BOOK PRESENTS THE DOCTOR'S CASE AGAINST SOCIALIZED MEDICINE

Out of the welter of information on the nation's health, Dr. W. W. Bauer of Chicago, director of the American Medical Association's Bureau of Health

Education, has produced an authoritative and highly readable presentation of the doctor's case against compulsory health insurance.

SANTA CLAUS, M.D., merits careful consideration by every citizen, for the future of medical care in the United States affects everyone and every aspect of living. In simple language and often highly amusing style, this recently published book presents expert testimony needed for a decision for or against compulsory health insurance that under a democratic government can be made only by the voters.

By detailing the American Medical Association's 12-point program for improving the nation's health, Dr. Bauer explains what 140,000 or more doctors are doing and planning to do in serving the country's health needs. The book presents medical evidence to dispute claims by advocates of compulsory health insurance that Americans are in bad health, that they cannot afford medical care and that there are not enough doctors. It reviews the ways of paying for medical service. It shows in terms of the community what the medical profession is doing to provide more good doctors, not just more doctors. It explains the full value of what doctors plan and exactly why they feel compulsory health insurance would upset their plans, and, more important, their relations with and services to patients.

Dr. Bauer is well qualified for the job of author-advisor on both the scientific and socio-economic aspects of health questions. In his long experience as a practicing physician and health education expert he has demonstrated the rare quality of medical showmanship—the ability to take the complex data of the medical profession and make it dramatic and meaningful to the lay reader without sacrificing accuracy. His writing consistently has shown the "human touch" of humor and grasp of subjects both from the point of view of the doctor and that of the patient.

Director of health education for the A.M.A. since 1932, Dr. Bauer also has been editor of its magazine, *Today's Health* (formerly *Hygeia*), since 1949, after serving 15 years as associate editor. Among his successful books are *Health, Hygiene and Hokey*, *Americans Live Longer*, *Health Questions Answered*, and *Stop Annoying Your Children*. In 1947 he was awarded the Elizabeth Severance Prentiss Medal by the Cleveland Health Museum for outstanding achievements in health education. He served the United States Military Government in Germany as a consultant in public health problems in 1949.

Santa Claus, M.D. By W. W. Bauer, M.D. 266 pp. Indianapolis: The Bobbs-Merrill Company, Inc. \$2.75.

WHEN IT'S EPILEPSY

Epilepsy is a common disease, but, because of its characteristic nature of developing into convulsions, individuals afflicted with the condition are apt to be shunned by general society. This is unfortunate, since the disease affects persons in all walks of life and in all intellectual and economic levels, according to the Educational Committee of the Illinois State Medical Society in a *Health Talk*.

There is probably more misunderstanding, more incorrect beliefs, more fear and more unjustified discrimination associated with this disease and the people who suffer from it than any other illness. This is particularly unfortunate because in 80 to 85 per cent of the cases it is possible with proper treatment to abolish or control the spells from which these patients suffer, permitting them to lead normal and active lives. In fact there are many persons with epilepsy who are married, have families, hold important business positions and are engaged in various professions.

The word epilepsy means seizure. Occurring in two forms, one type of seizure, Grand Mal, occurs as a result of an irritation of the brain. From the brain a nervous discharge spreads down from the brain through the spinal cord and then out through the

nerves to the muscles to stiffen and twitch.

The second type of seizure, known as Petit Mal or minor spell, is often so mild that it may pass unnoticed by people outside the family. The individual suddenly stops what he is doing and becomes unaware of what is going on about him.

Although the generalized convulsive seizures or major spells seldom cease permanently without treatment, the minor spells or Petit Mal are most common and most frequent during childhood, tend to diminish as the patient grows older and may even cease as he becomes an adult.

In epilepsy, each case must be treated individually. There are many different forms of treatment and they must be fitted to the particular case. What is suitable for one is often unsuccessful in another. And again proper treatment does not depend solely on the prescription of the proper medication by the physician, but thorough cooperation by the patient is essential. It is rather common for patients to go for a year or so after beginning treatment without a single attack and then suffer from one or a series of seizures. This occurs because the patient has either decided himself that he is well or has been inconsistent in applying the treatment the physician has indicated.

The consumption of alcoholic beverages will also cause attacks in patients whose seizures have otherwise been controlled. And then it is easier to control the spells if proper and adequate treatment is begun early. Very often it is difficult to obtain satisfactory relief for a patient who has had spells for several years without proper control.

Grand Mal or Petit Mal are what might be termed ordinary epilepsy. There are other epileptic seizures which if noted for the first time in adult life may be traced to some other condition, involving insufficient amount of sugar in the blood, insufficient supply of blood to the brain because of heart disease and so on.

Most cases can be managed adequately by the family physician. Where special tests are needed, it is the family physician who should be consulted.

CORTISONE SIDE EFFECTS REDUCED BY SMALLER DOSAGES, REPORT SHOWS

The development of a dosage of cortisone acetate to maintain improvement in cases of rheumatoid arthritis with a minimum occurrence of undesirable side effects is reported in the September 30 *Journal of the American Medical Association*.

Cortisone is not a cure for the disease, but its administration reverses crippling results. Its continued use is necessary in order to prevent the return of the pain and deformities which mark rheumatoid arthritis. The problem of physicians using the drug has been to prevent complications in side effects.

A report on the treatment of 42 patients is made by Dr. Edward W. Boland and Dr. Nathan E. Headley of Los Angeles. Based on preliminary studies, they said it appears that some severe cases and most less severe cases may be kept under adequate clinical control for long periods, and with relative safety, with smaller maintenance doses ranging from 32 to 65 mg. a day provided larger doses to suppress the disease are used initially.

"Comparatively few unfavorable reactions have developed when these small doses have been used continuously for as long as six months," they reported. "So far all adverse effects have been temporary, disappearing on hormone withdrawal or lowering of the dosage."

However, they added:

"Only time and further experience will determine the full therapeutic possibilities of cortisone for rheumatoid arthritis. Explorations of its potentialities as a treatment agent are greatly influenced by one fact: The hormone suppresses rheumatic activity but does

not cure the underlying disease. Thus, it appears that if antirheumatic effects are to be sustained, cortisone must be given continuously.

"The question as to whether the hormone can be administered safely and effectively for extended periods of many months or years will not be answered positively until there has accumulated greater clinical experience in relation to dosage and methods of administration, greater knowledge regarding its physiologic activities and more information as to the consequences of its prolonged or repeated use."

WATCH THAT WHEEZE

Asthma is a broad term meaning any condition in which wheezing occurs but bronchial asthma is almost certainly an allergic condition, the Educational Committee of the Illinois State Medical Society observes in a *Health Talk*.

In bronchial asthma the symptoms are wheezing, shortness of breath and cough. As in any form of allergy, the sufferer has usually inhaled or eaten certain substances which are harmless to the majority of persons, but which produce great distress in those individuals sensitive or allergic to them.

In many persons, it is difficult to lie down during an attack; they resort to all procedures, such as sitting up all night long in a chair or leaning forward on a table to help them breathe more easily.

The wheezing associated with bronchial asthma varies with different patients. Sometimes the wheeze is very quiet and can be heard only with a stethoscope. Sometimes it is so loud that the sound can be heard clear across the room and even in the next room.

The wheezing occurs when the victim attempts to get the air out of the lungs. In a person with a chronic bronchial asthma, an x-ray film of the chest will show that the diaphragm is pushed down from its normal position and the ribs will have a straight character instead of the normal curved formation. This change develops because the sufferer is using all the muscles he has to push out the air which has become trapped in the breathing apparatus of the chest. Very often this action produces another condition which is called emphysema.

Bronchial asthma is also characterized by the history of other allergic conditions, either in the patient or the patient's family, indicating heredity to be a factor in at least sixty per cent of the cases. That is why children of allergic parents should be watched very carefully from the day of birth. Each new food should be given one at a time to learn whether the baby tolerates it.

A skin test is the usual method of establishing the culprit causing bronchial asthma. The skin is scratched with fine lines, ordinarily a number of rows are made. The site may be either the forearm or the back, while in children it may be either the chest or the abdomen. Only the outer layer of the skin is scratched and no blood is drawn. Materials, both in liquid and solid form, are then applied to the scratches. If positive, a sort of hive formation will result. Then, if necessary, an injection procedure may be used to obtain more information.

Persons inclined to wheeze, be short of breath and cough should be suspicious of asthma. If a diagnosis has been definitely established, they should avoid anything that causes an attack, such as certain face powders, cats, dogs, horses and certain food. Dust should be avoided. In house cleaning a good vacuum cleaner with attachments should be used, and sweeping and dusting should be avoided. Whisk brooms only shift the dust from one place to another.

Best results in asthma occur when the cause is found and then avoided. If the cause cannot be entirely avoided, the patient can be given injections of an extract of the offending substance to help him build up a resistance to it.

THE JOURNAL

OF THE

MEDICAL ASSOCIATION OF GEORGIA

PUBLISHED MONTHLY under direction of the Council

Vol. XXXIX

Atlanta, Georgia, December, 1950

No. 12

HYPNOSIS IN THERAPY

RICHARD M. NELSON, M.D.

and

CORBETT H. THIGPEN, M.D.

Augusta

There is available to physicians today a valuable therapeutic technic. Few reputable physicians regardless of their personal views, dare use it for fear of being associated with quackery or charlatanism. Aside from the necessity for considering public opinion, many physicians view hypnotherapy with a sincere feeling of distrust and even hostility.

It may be worthwhile to look more deeply into the cause of this rather prevalent attitude. It should be remembered that few medical schools include hypnotic technics in their curricula and that opportunities for graduate training in hypnotherapy are almost non-existent. Most physicians as well as laymen have observed hypnotic suggestion chiefly on the stage or in the hands of charlatans where the spectacular, sensational, and often bewildering aspects of the hypnotic state are used to overawe and mystify the subject as well as the audience. Explanations and understanding of the whole procedure are carefully avoided, while, in the actual induction of hypnosis, every attempt is made to exclude critical thinking and to create a childlike belief in the magical powers of the hypnotist. On the surface, this whole therapy, as it is presented on the stage and described in sensa-

tional reports of the lay press, seems irrational and unscientific. The well intended but mistaken use of hypnosis by inexperienced and untrained experimenters, and "psychological healers" has further confused opinion. This is because symptom removal, *per se*, is usually temporary. The deeper underlying causes of symptoms must be dealt with before satisfactory relief is obtainable¹³.

Recently, workers have demonstrated the value of hypnotic technics in the treatment of hysteria, anxiety, acute combat reactions, amnesias and fugue states^{1 5 6 12 13 15}. It has also been successfully used as an anesthetic in selected obstetric, gynecologic and dental cases, and in controlling such symptoms as insomnia, excessive smoking, enuresis, premature ejaculation, speech disorder, etc.^{2 3 8 9 15}. In many organic diseases hypnosis can be helpful in relieving the associated fear and worry and in securing greater cooperation in the therapeutic regime. This is true particularly when a major change in habits of life is indicated, as in peptic ulcer, hypertension, angina, etc.^{11 10}.

Experience has shown that practically all normal persons can be hypnotized, the only prerequisite being that the patient's motivations to go into the hypnotic state be stronger than his fears of the process^{4 5}. Hence the value of a preliminary discussion with the patient in which his misconceptions and fears of hypnotic therapy are clarified and dissipated; i.e., *there is no true loss of consciousness* and hence no danger of "not waking up"; the patient's going into the hypnotic state does not indicate a "weak will"

Read before the Medical Association of Georgia in annual session, Macon, April 20, 1950.

or "weak mind"; he will be able to veto any suggestion that is strongly distasteful to him; and he will discuss his deepest "secrets" only if he desires to do so. On the other hand, the patient is being trained in the use of unconscious, and ordinarily involuntary, mental forces that all normal persons possess but which few can control. In many cases it will be particularly expedient to eliminate any mention of the word "hypnosis", because of the unfortunate connotations of superstition and black magic which the term elicits.

Similarly, any person of average intelligence can learn to be a hypnotist. Any technic with which the therapist is thoroughly familiar and which obtains adequate cooperation from the patient may be considered a good technic. The physician should learn to be flexible, however, and to adapt his technic to the personality needs of his patient and be able to vary from a strongly authoritative, domineering approach to coaxing or persuasion; or even to guiding on a basis of complete equality². The hypnotic phenomena may be presented purely as "magic" or as creative productions of "unconscious forces" which the patient is learning to control.

The nature of the hypnotic state has been the subject of endless speculation and controversy and, as yet, a theory that adequately explains all the phenomena of hypnosis has not been proposed¹⁵. It has been demonstrated that hypnosis is not sleep, that the patient is in a state of increased "suggestibility" and that while in this state an increased "control" of sensory and emotional response of the patient to outside stimuli is obtainable.

We attempt in authoritative methods of inducing hypnosis, gradually to eliminate more and more sensorimotor relationships with the world until the hypnotist becomes the patients dominant link with reality¹⁰. As

you will see in the description of this technic our purpose is to have the patient relinquish all, or almost all, external contacts except auditory; to eliminate gradually the sensory mechanisms one by one until this purpose is accomplished.

Hypnosis when induced by authoritative method seems to be a process of regression. The state which exists is one resembling sleep in which one or two channels of contact with the outer world are maintained. The thoughts of the hypnotist, who is using this method, in a way, become the nucleus of the thoughts of the patient. The desires of the hypnotist become the patient's desires and gradually there is, one might say, a dissolution of the ego boundaries. This process has been well described by Kubie and Margolin. They state, "It is this dissolution of ego boundaries that gives the hypnotist his apparent 'power'; because his 'commands' do not operate as something reaching the subject from the outside, demanding submissiveness. To the subject, they are his own thoughts and goals, a part of himself¹⁰." In some ways, ordinary sleep is similar to such a hypnosis, but in other ways it differs greatly. As we go to sleep we gradually reduce our sensorimotor communications. First, of course, we cut out the lights so that we can be in comparative darkness, thus eliminating the visual stimulation. We lie quietly at rest allowing tired muscles to relax and relieve muscular tension, eliminating another channel. Our bedrooms are usually rather quiet where we may hear only the repetitious ticking of the clock, or perhaps the chirping of crickets. Thereby, the auditory channel is considerably narrowed. We lie in bed, usually with our thoughts of the day and plans for the future. Gradually, these thoughts wane as we drop into a semi-sleep or hypnagogic state. This, too, gradually slips away and we are asleep.

All hypnosis differs from sleep in many

fundamental respects. Sleep is an ordinary physiologic process, whereas hypnosis, particularly when the usual authoritative method is used, is induced or promoted by means of a second party. Further, in sleep the ordinary person is not under the influence of another person, whereas in hypnosis the subject may be strongly influenced by the hypnotist. A person who is asleep can be easily awakened by external stimulus. Whereas a person under the usual type of hypnosis, as a rule, can be stimulated and awakened only by the hypnotist himself. This is, however, not true if the hypnosis has been induced by the non-authoritative method in which the patient plays an active part. A hypnotized subject can carry out all the activities normally associated with the awakened state. Physiologically, Estabrook has shown by means of the psychogalvanometer that there is a very definite drop in electrical skin resistance in sleep, whereas the resistance in hypnosis is the same as in the un hypnotized state⁴.

In all methods of inducing hypnosis, it is helpful to create relative immobilization of the patient by the use of a monotonous stimulus, low and rhythmical in nature. Monotony plays a factor in creating a sensory adaptation by providing a stimulus of constant intensity which tends to lull the subject to sleep. It has been our experience that rhythm of suggestion, plus a smooth, even, clear voice is conducive to putting a patient into the hypnotic state. It is interesting to note the difference in the patient during the induction stage and during the authoritatively induced hypnotic state. In the induction, there is a marked narrowing of the ego boundaries of the subject by reduction of the sensorimotor channels. The only sensorimotor channel open is that between the subject and the hypnotist. In the transition into the fully developed hypnotic state there is a partial expansion of the ego boundaries into which the hypnotist has been

interjected and the subject is again able to assume more reactions of the ordinary awakened state¹⁰.

There are almost as many methods of inducing hypnosis as there are hypnotists and, as mentioned previously, any technic which obtains adequate cooperation from the patient may be considered a good technic^{2 14}. The hypnotist should adapt his methods to suit the personality and psychic needs of the patient. Hypnotic induction technics have been classified into two general types¹⁵:

1. *The Authoritative*: This is the type generally seen on the stage. Here the patient remains passive and in a sense becomes strongly dependent on the therapist; and

2. *The Non-Authoritative* or indirect technics, in which the patient assumes a varying amount of responsibility for his induction and for the production of hypnotic phenomena.

Technic of an Authoritative Induction Method

The subject is asked to stand with his feet close together. He is then told to look at the hypnotist, straight in the eye and to allow his body to relax as much as possible. He is requested next to clasp his hands together tightly. The hypnotist then places his hands on either side of the subject's head, the palms being allowed to extend out beyond the eyes, thus serving as "blinkers". (This is done in order to constrict the visual field of the subject.) The hypnotist then stares at the bridge of the subject's nose and tells him several times to squeeze his hands more tightly together. The hypnotist then begins to gently draw the patient's head very slightly backward and forward. He then says to the patient, "you are gradually beginning to sway backward and forward. Keep looking straight into my eye. Backward and forward—backward and forward. You are swaying more and more (the hypnotist draws the head back and forth more

strongly to create this swaying.) The tighter your hands become, the drowsier you will become. You are beginning to feel very tired now, very drowsy, very sleepy, squeeze your hands together and relax the rest of your body; do as I say do. You are now very drowsy, very sleepy; you are swaying, swaying, swaying, very tired, very drowsy, very sleepy. Your hands are tightly interlocked. The tighter your hands become, the sleepier you become. You are getting very, very sleepy now. Your eyelids are beginning to close. Your eyelids are beginning to fall. Close your eyes; close your eyes. You are very tired now, very sleepy, very sleepy, very tired. The tighter I press upon your head with my hands, the sleepier you will become. You are now extremely sleepy, extremely drowsy; your hands are pressing tightly together, tighter, tighter. You are very sleepy; do as I tell you to do. Go to sleep; go deeply to sleep. Your hands are now pressing very tightly together and it is impossible for you to open them. It is now impossible for you to open them. Your eyelids are sticking tighter and tighter together, tighter and tighter together. You cannot open your eyes. You are extremely tired. You are extremely sleepy. Go to sleep—deeper to sleep—very much deeper to sleep. Now, you are deeply asleep. You will do all that I tell you to do. You hear no sounds except the sound of my voice. You will do all that I tell you to do.”

Discussion

The choice of this technic depends upon the personality of the subject and his intellectual capacity. The tone of voice used in this technic is most important. The appearance, manner and voice of the hypnotist are also very important. He may use a coaxing or demanding induction or one in which the subject is made to feel on an equal footing. These melodramatic maneuvers work extremely well on certain types of patient. Notice that they are designed to immobilize

the subject and to create monotony. Further, the subject is also fastening his sensory modalities to one field of sensation and gradually withdrawing attention from all others. Other patients resist all authoritative approaches, apparently feeling a serious loss of dignity or self-control may be involved. Many people may be frightened by the implications of black magic they find in the situation.

Technics of the Non-Authoritative Induction Method

One of the authors (R.M.N.) has developed a modification of Erickson's hand levitation technic which places a much more definite responsibility for the induction process, as well as the production of hypnotic phenomena upon the patient himself^{1 16}.

In this technic, the patient may be seated in a chair, or, preferably, should lie on a bed. It is explained that his symptoms may well be caused by unconscious emotional forces which he can learn to understand and to control. Suggestions are generally as follows:

“You have a very important job to do—I'm going to give you *word-pictures* of sensations in your arm which I want you to translate into *sensation pictures* by using your imagination. Make these *sensations* just as vivid and as real as you possibly can.

“Now, shut your eyes so that you can concentrate more deeply. I want you to lift your right hand up a few inches with the palm upwards. That's right! Now stiffen all the muscles in your forearm and hand. Make them tight. Good! Picture an invisible force pushing against the back of your arm. Let yourself feel waves of force that sweep up against the back of your elbow, that rise up to your fingers like waves sweeping in from an imaginary ocean. Each wave pushing more strongly. The feeling of pressure growing more intense. A feeling of expectancy mounting, that soon—any second now, your hand will move without

conscious effort toward your face . . . will begin to move in a series of little jerks toward your face. Any second now it will move . . . There, it moved! And now the pressure builds up again, the tension mounting higher and higher—and, . . . there it moved again. A pleasant sensation of movement without conscious effort. It will continue to move like that until it touches your face. When it reaches your face, it will be the signal that you have reached a very deep state of relaxation. It's moving more rapidly now. Already it has passed the half-way mark and soon it will touch your face. No matter how tired you may become, don't let yourself stop until your hand reaches your face. Then you can relax. Soon it will touch—it's almost there now—any second it will touch your face and you will be very deeply relaxed. Now! It touches and you can let go and relax completely. That's fine! I'm going to move your arm down to your side now without disturbing you. You've done very well and the next time we try this, you will be able to relax even more quickly and more deeply because you know how to do it now."

The patient is then asked to picture a hundred pound sack of cement resting on top of his arm and to imagine that the arm is becoming too heavy to lift because of the heavy weight pressing it down. He is told that, by the time the therapist counts from one to three, it will be too heavy to lift. After unsuccessful attempts to lift the arm, the subject is allowed to remove the catalepsy by counting to three mentally.

In like manner, catalepsy of the eyelids is induced by placing imaginary glue on the eyelids and asking the patient to recall similar sensations when his eyelids were stuck shut during childhood inflammations.

Similarly catalepsy of the mouth is produced by having the patient picture his mouth being stuck shut by very sticky taffy candy; and anesthesia may be induced in a

hand by asking the patient to imagine that a pressure around his wrist has shut off sensations from his hand and that it is going to sleep in the same manner that his foot may have gone to sleep in the past so that eventually it becomes completely without sensation or anesthetized.

Discussion

It will be noted that the patient has been guided into progressively deeper and deeper hypnosis by inducing catalepsy in larger and larger muscle groups and, finally, sensory changes. In this process he is shown the strength of the "unconscious" forces of his "mind" and gains confidence in his ability to use them.

With this technic, it was possible to induce therapeutic levels of hypnosis in 46 of a current series of 48 unselected patients. However it is not well adapted to the patient who has a pathologically poor opinion of himself and his abilities. Here, an authoritative technic may give better results until the patient achieves a more optimistic viewpoint.

Korzybski⁷ has pointed out that the *words* used in describing an "event" are necessarily abstractions of far more detailed sensory impressions. It is possible for a person to "realize" very much more about the pain involved in a friend's toothache if he has himself experienced such a pain. In effect, he recalls his painful experience, "relives" it in miniature, and then can evaluate his friend's toothache in terms of his own experience. The process is even better illustrated by the difficulty of describing a color such as *red* to a color-blind person. Having never experienced the sensory impression that we term *red*, this hypothetical person can recall color only in terms of past experience in which the sensation of "red" is lacking. He can have no extensional understanding of this word.

It may be helpful to further classify hypnosis into *Intensional* and *Extensional* types

according to the formulation of the suggestions used.

Intensional suggestions have often been employed with *authoritative* hypnotic technics. To a lesser degree they also have been used with the *non-authoritative* technics. A therapist, for example, may attempt to induce hypnotic phenomena through such suggestions as these:

"As I count to *three*, your eyes will shut more and more tightly and when I reach *three*, it will be impossible to open them."

"As I stroke your arm it will gradually become less and less sensitive and finally, on the count of three, will be completely anesthetic."

The degree of success obtained with such suggestions will depend on the patient's ability to convert them into more concrete or *extensional* experiences, to recall such experiences, and to project them in accordance with the therapists' suggestions. That many patients are able to do this successfully, is attested by numerous reports in the literature. However many failures, especially in inducing anesthesia, may be explained by the patient's inability to convert a generalized or *intensional* suggestions into specific *extensional* experience³.

In contrast, *extensional* suggestions are so worded as to recall past experiences of the patient more on a *sensory* than on a *verbal* level. The patient can then re-experience and utilize in enormously greater detail than could ever be achieved by "verbal" means alone. Examples of extensional suggestions are given above in the detailed account of a non-authoritative technic.

The almost universal use of suggestions detailing the sensations that frequently precede sleep (as a means of inducing hypnosis) indicates an "unconscious recognition" of the value of using the past experiences of the patients to reinforce and strengthen purely "verbal" suggestion.

REPORT OF CASES

Case 1. (M.B.B.) A 23 year old quadroon was brought to the emergency room after being picked up by the police when she was found wandering around the streets of the city in a dazed state. The patient would obey (to some degree) direct orders in her waking state. She was put under hypnosis by the authoritative induction technic. After the hypnotic trance was obtained, the hypnotist talked to the patient very gently and softly for fifteen or twenty minutes, reassuring her and telling her it was his desire to help her, no matter how difficult a problem it might be. Then by direct questioning it was found why the patient was in such an emotional stupor. She had been living with a married man for the past eight years. By him she had three children. Over the past year he had threatened again and again to desert her and the children, thus leaving them to their own devices. Two hours before she was brought to the emergency room, he became very positive in his statements. She felt that her problem was insoluble and there was no possibility of extricating herself. The problem was attacked directly by calling the man to the hospital for an interview. A number of hours of psychotherapy brought about a reconciliation and a change in attitude on the man's part. The patient has had no trouble whatsoever for the past five years following this episode.

Case 2. Mr. "B", a 54 year old professional speaker, came to therapy with a complaint of cramping and drawing spells in which his extremities would lock in tetanic positions until he was given an injection of calcium gluconate or barbiturate. These symptoms had been present for more than 30 years following an attack of acute gastro-enteritis accompanied by nausea and vomiting. He has had several episodes of altered consciousness—during one of which, some 25 years ago, he attempted suicide.

By use of the non-authoritative induction technic just described, the patient readily reached a state of light hypnosis—showing a lively interest and curiosity as each new phenomenon appeared. Some three sessions were spent in training him in going into a hypnosis of medium depth. On the third session the patient was thrown into one of his typical "drawing" spells by appropriate suggestions and then told that he could relax himself completely by concentrating on his left hand and imagining that invisible forces were pushing it toward his face. The hand, slowly, and with apparent effort, moved up to his face and he relaxed with a sigh of relief.

The next day another attack was induced and this time the patient relaxed himself by the use of self-hypnosis. He then returned to his home, some distance away, and returned at regular intervals for continued therapy. At subsequent sessions he reported that his now infrequent "spells" were easily controlled by use of his self-hypnosis and that he also had learned to control his insomnia.

After a month's therapy, the patient was taken into a slightly deeper state of hypnosis in which he recalled in vivid detail his suicidal attempt some 25 years previously. When asked why he had not been able to give these details previously he said, "I just wouldn't let myself think about it."

In the next few months the patient continued to recall and abreact to numerous traumatic events of his childhood and showed growing insight and maturity of viewpoint. He has now been asymptomatic for approximately six months and states that he feels better than he has in years.

It may well be objected that this therapy consisted largely of "symptom removal" and that we are being inconsistent in criticizing others for using hypnosis simply for that purpose. However we feel as the patient has become proficient in self-hypnosis, we have, to a considerable degree, strengthened his defenses against anxiety to a point at which his symptoms are

no longer troublesome and have given him the courage to look more deeply into his personality structure.

Case 3. (C.R.S.) A colored woman, 43 years of age, had been admitted to the hospital with a tentative diagnosis of cerebral hemorrhage. One week before admission she had developed a hemiplegia over the entire right side of her body. More careful examination revealed all deep and superficial reflexes to be intact despite the apparent paralysis and anesthesia on the right side. Diagnosis of conversion mechanism was made and the patient was put into the hypnotic state by use of the authoritative method. During the next several hours, by the inducing some degree of regression, the patient was able to reveal her problem. Her only son had been in the Army for two years. During that time she had not heard one word from him and had no idea where he was. She had become extremely concerned about this, but was able to meet the problem fairly well until her husband became quite seriously ill and was unable to provide for the rest of the family. The patient had nobly risen to the occasion endeavoring to support the family by taking in washing. After a few weeks, it became obvious to all of them that they could not survive with her meager earnings. The patient then developed her symptoms. It is interesting to note that for a week after the diagnosis of conversion mechanism was made, psychotherapy had been used in an attempt to uncover her problem but to no avail. A solution of this patient's problem was rather easy. The Red Cross was called upon and they located the patient's son. He wired his mother money and a loving message. Within five minutes after receipt of this telegram, all traces of the patient's paralysis and anesthesia had totally vanished. The son continued to write once a month thereafter until he was discharged from service. Five years have elapsed since this patient was first seen and there have been no recurrent symptoms.

Summary and Conclusions

The prevalent feeling of distrust and hostility towards the use of hypnotherapy is, to a considerable degree, due to its unfortunate association in the public's mind with the melodramatic performances of the stage hypnotist.

Two sharply contrasting technics of inducing hypnosis are described in detail: An *authoritative* technic similar to those generally seen on the stage, which is best adapted to the unsophisticated, dependent type of personality; and a non-authoritative technic which is better adapted to those patients who are more analytically-minded or who resist authoritative methods through fear of loss of dignity or self control. The latter method is felt to have a wider range of usefulness as it can be successfully employed in more than 95 per cent of unselected patients.

It is felt that hypnotic suggestions are necessarily interpreted by the patient in

terms of his past experience. Hence suggestions are far more effective if worded so as to recall previous experiences more on a *sensory* than a *purely* verbal level. The patient can then "re-experience" and utilize them in enormously greater detail than could ever be achieved by "verbal" means alone.

Hypnosis remains a very valuable aid in therapy but should not be thought of as supplanting other methods of treatment. It is best employed to re-inforce, and add speed and directness to psychotherapy in which the goal is restoration of a previous level of functional equilibrium rather than an exhaustive reintegration of the personality structure.

BIBLIOGRAPHY

1. Erickson, M. H.: *Am. J. Psychiat.* 101:668, 1944.
2. Erickson, M. H.: *M. Clin. North America* 28:639, 1944.
3. Erickson, M. H.: *M. Clin. North America* 32:571, 1948.
4. Estabrooks, G. H.: *Hypnotism*, Dutton 1946.
5. Fisher, Chas.: *Psychoanalyt. Quart.* 14:437, 1945.
6. Kartchner, and Karner: *Am. J. Psychiat.* 103:630, 1946.
7. Korzybski, A.: *Science and Sanity*, Science Press, ed. 2, 1941.
8. Kroger, W. S., and Freed, S. C.: *Am. J. Obst. & Gynec.* 46:817, 1943.
9. Kroger, W. S., and Lee, S. T.: *Am. J. Obst. & Gynec.* 46:655, 1943.
10. Kubie, and Margolin: *Am. J. Psychiat.* 100:611, 1945.
11. Lewis, N.D.C.: *M. Clin. North America* 28:565, 1944.
12. Lindner, R.: *Psychoanalyt. Rev.* 32:325, 1945.
13. Lorand, S.: *J. Nerv. & Ment. Dis.* 94:64, 1941.
14. Van Pelt, S. J.: *Brit. J. Med. Hypnotism* 1:19, 1949.
15. Wolberg, L. R.: *Medical Hypnosis*, Grune & Stratton, 1948, vol. 1.

SUDDEN DEATH IN PSYCHIATRIC PRACTICE

JOSEPH D. McELROY, M.D.

Atlanta

Sudden death is defined as death occurring unexpectedly in an individual who is apparently in good physical health or who is not known to be seriously ill. Suicide is too large a subject to be included beyond stating that any severely depressed individual may attempt self destruction. Emotional shock is too controversial a subject to be dealt with here. Epilepsy, *per se*, is rarely responsible for death and in status

epilepticus exhaustion may be considered the lethal factor.

Subdural hemorrhage in senile people and those predisposed by chronic alcoholism, paresis and arteriosclerosis may progress to fatal coma without premonitory symptoms. Cerebral edema, particularly common in alcoholics, may be rapidly progressive. There have been many diagnoses of hysteria, catatonia, etc., which have been changed to diagnoses of meningitis, encephalomyelitis and brain tumor after post mortem examination. In recent years it has become more evident that fatal undiagnosed adrenal and pancreatic tumors may be responsible for unusual behavior disorders. Sudden death from physiologic exhaustion is not uncommon in hypomania and catatonic excitement.

Menninger von Lerchenthal¹, in an article, "Death from Psychic Causes," says: "It is well known that there are sudden deaths in psychoses in which pathological anatomic examination discloses no adequate cause to which death can be attributed". This he attributes to a hypersensitivity in the vagus cerebral centers. Almost any text book of anthropology bears reference to death through suggestion of aborigines convinced that they were under some powerful hex. One wonders if the time worn old phrase "scared to death" is entirely illogical!

Statistics relative to mortality rates in convulsive therapies vary so widely as to cast doubt on their reliability. Will, Rehfeldt and Neumann² reviewed the literature dealing with complications associated with electroshock therapy. Thirty-three deaths were noted in American and English literature. "Of these 26 may be said to be related to the electric shock, details of two are unknown and five are only questionably related to the treatment. There were no deaths that could be attributed definitely to changes in the central nervous system pro-

duced by the passage of the electric current and demonstrated by post mortem examination". More references throughout the literature may be found to deaths attributable to metrazol and considerably more to insulin shock.

It is generally recognized that many neurotic individuals demonstrate anxiety, hypochondriasis or depression to the presence of organic disease and that there are instances in which mental symptoms may precede detection of signs of organic brain disease. Brock and Wiesel³, reported four cases of individuals, diagnosed as psychotic, in view of negative neurologic findings who were given electro-shock and later found to have tumor of the cerebrum.

Brain tumor as a factor complicating psychiatric diagnosis has been explored by many including McIntyre⁴, but unique features of a recent experience seem to warrant reporting of the following case.

A forty year old white male presented himself to his physician in June 1949, with complaint of headaches following attacks of severe streptococcic throat and prostatitis in December 1948. The headaches had been growing progressively worse and for the previous two months had been accompanied by frequent transient dizziness, apparently made worse by the taking of large amounts of empirin. In the process of examination by a neurologist, additional historical details were noted: general health good until two years previously; "colitis," manifested by intermittent attacks of nausea and diarrhea for two years, and loss of weight from the usual 123 pounds to 112 pounds. Neurologic examination was negative except for fine horizontal nystagmus, barely perceptible vertical nystagmus, slightly unsteady gait, and apparent marked tenderness to deep pressure over the posterior cervical muscles. The impression was that there was no definite objective evidence of organic disease of the nervous system and that the

findings pointed to a posterior cervical fibromyositis, such as usually occurs in people who are quite neurotic. Four days later the patient's wife reported that he had been "wild with headache," that he had been quite depressed for some eight months to the extent that six months previously he had refused a trip to Mayo's for fear of suicide en route, that he was an exceedingly conscientious individual who was under terrific strain at work, that he was concerned about lack of cooperation from fellow employees and that on several occasions he had said, "I can't control my thinking." At that time he was referred for psychiatric treatment with the notation that a depression of such serious proportions might necessitate shock therapy.

When first seen on June 30, 1949, he complained of severe headache not relieved by large amounts of sedation taken for several weeks, transient diplopia, insomnia, anorexia, depression and periods of extreme restlessness. He was hospitalized for psychiatric observation. Next morning he reported himself to be free of pain and to be hungry for the first time in a month. Pertinent features of the personality study included average social adjustment and an unusually close relationship to his father, both diminishing after marriage; strain of living with in-laws leading to purchase of a house with consequent increased worry about finances; exacerbation of gastrointestinal symptoms concurrently with occupancy of the house; sensation of decreasing efficiency in performance of duties in which two predecessors had "cracked up," a fate which he feared for himself; and during a two week vacation in June 1949, realization that he could not continue in an executive capacity but must return to a routine job at half the pay. A member of his family stated, "When the time drew near for him to go back to work and he had to go back on the

job, he felt defeated—perhaps he felt guilty within himself that he had been a failure and wasn't going to be able to provide his family with as much as he had been able to provide them with and started developing these headaches because they got worse the week before he was to go back."

Although there was no doubt about the presence of a serious depression, further investigation was considered necessary before recourse to shock therapy. X-rays of the cervical spine, glucose tolerance, blood studies and urinalysis were noncontributory and no change neurologically was noted. On the fourth hospital day, with awareness of the classic admonition to avoid lumbar puncture in the presence of increased intracranial pressure, a twenty gauge spinal needle was introduced through the fourth lumbar space without difficulty. Initial pressure of 160 mm. of fluid was recorded and 10 cc. of clear fluid was withdrawn, with no apparent obstruction. The Kahn test was negative, 3 r.b.c. were found and protein was reported as 40. No change was noted in his condition until the third and fourth days after the tap, when he complained of increased headache. Observers agreed that increased symptoms were related to certain observed emotionally disturbing incidents. However, the following day he complained more bitterly of headache, became comatose ten minutes after receiving his routine afternoon insulin (10 units) and died almost immediately.

The death was totally unexpected and, prior to autopsy, there was no reasonable hypothesis as to the cause of death. Positive findings, except for a small area of caseation in the right lung, were noted only after the skull was opened. A marked degree of cerebral edema was apparent, and when the brain was dissected from its attachments there was seen a pressure cone of the inferior cerebellum into the occipital foramen, indicating that the passage of fluid

through the fourth ventricle had been blocked. The right cerebellar hemisphere was considerably enlarged and was largely occupied by a cyst containing watery light yellow fluid. The cyst lining was smooth except for a plaque 8 mm. in diameter. The pathologist reported: "The whole picture of this cyst is unusual. Such a cyst, according to Lindau, probably is the result of degeneration of either an astrocytoma or a hemangioma. It is my feeling that the latter view is correct in this case, even though only a very small remnant of hemangiomatous tissue remains." This condition differs from typical Lindau's disease in the absence of hemangiomas in the skin and liver. It was the opinion of those who saw the cyst that it may have been present for years.

In speculating as to the immediate cause of death, an unwelcome conclusion presents itself. Loss of fluid from the spinal canal, including probable post tap seepage, permitted the increasingly edematous brain suddenly to shift in position so as to produce an immediately fatal medullary compression.

The emotional picture can best be accounted for on the basis of an original anxiety, aggravated by situational factors and complicated by an increasing awareness of inadequacy to cope with environmental demands. The preponderance of elements of situational reaction rather than of endogenous depression indicated poor prognosis in response to electro-shock,—hence, it was not used.

Important features of this case include: relative infrequency of cerebellar tumors in comparison with tumors of the cerebrum which are known to produce emotional disturbances, absence of signs of increased intracranial pressure, definite functional symptoms which are commonly seen in states of depression, and paucity of neurologic findings. In the latter connection, it

was interesting to find a few days later a case in which chief signs and symptoms of severe occipitocervical headache, horizontal and vertical nystagmus, extreme unsteadiness of gait, and depression cleared up under withdrawal of heavy sedation and psychotherapy.

The psychiatrist, neurologist, internist and general practitioner involved at various stages have each profitted by reemphasis from this experience. Functional and organic symptoms can and usually do exist simultaneously. The autopsy remains of prime importance in our program of continuing medical education. Spinal puncture, although technically simple and the source of invaluable information, is a potentially dangerous procedure. Sedation may mask vital signs and symptoms and indeed may produce misleading findings.

While some of our most valuable lessons come as the result of bitter experience, we must avoid extreme overcautiousness which would blind us to the obvious while searching for the obscure.

REFERENCES

1. Menninger von Lerchenenthal, Erich: Death from Psychic Causes, *Bull. Menninger Clin.* 12:31-36 (Jan.) 1948.
2. Will, O. A., Jr.; Rehfeldt, F. C.; and Neumann, M. A.: Fatality in Electroshock Therapy; Report of Case and Review of Certain Previously Described Cases, *J. Nerv. & Ment. Dis.* 107:105-126 (Feb.) 1948.
3. Brock, Samuel, and Wiesel, Benjamin: Psychotic Symptoms Masking Onset in Cases of Brain Tumor, *M. Clin. North America* 32:759-767 (May) 1948.
4. McIntyre, H. D., and McIntyre, A. P.: The Problem of Brain Tumor in Psychiatric Diagnosis, *Am. J. Psychiat.* 98:720-726 (Mar.) 1942.

THE ADRENOGENITAL SYNDROME

RALPH HILL CHANEY, M.D.

and

ROBERT B. GREENBLATT, M.D.

Augusta

The adrenal cortex elaborates many hormones. Forty-two steroid compounds have been isolated from the adrenals. Many of

From the Departments of Surgery and Endocrinology. The Medical College of Georgia, Augusta.

Read before the Medical Association of Georgia in annual session, Macon, April 20, 1950.

these steroids have been shown to possess certain biologic effects while others appear to be physiologically inactive. In general it may be said that there are three main categories into which these steroids fall: anabolic, catabolic and electrolytic. In the anabolic group are the gonad like steroids with properties resembling either the androgens, estrogens or progestogens. The commonest of these are those with androgenic properties and are represented by the 17-ketosteroids. In the catabolic group are those steroids classed as the sugar regulating hormones. These are concerned with gluconeogenesis, i.e., the conversion of protein into carbohydrates and probably with the neutralization of insulin. The steroid characteristic of this group is 11-17 hydroxycorticosterone. The electrolytic group are the steroids which regulate electrolyte and water metabolism. Desoxycorticosterone is representative of this group although many of the gonadal and adrenal steroids influence electrolyte or water metabolism.

Hypercorticism suggests the overproduction of corticoid hormones. This may be due to hyperplasia, adenoma or carcinoma of the adrenal cortex. The stimulus for increased rate or aberration of cortical steroid metabolism may be inherent in the gland itself (primary) or may be pituitary in origin. When the corticoids produced by the adrenals produce signs and symptoms the clinical picture will depend on which corticosteroids are predominant. Frequently the picture is well defined and points to the anabolic group of corticoids (adrenogenital syndrome) and again it points to the catabolic group (Cushing's syndrome). At other times, there is much overlapping and the clinical picture is not clear cut. Indeed, Haymaker and Anderson¹ express the opinion that the adrenogenital syndrome differs from Cushing's syndrome in that the overproduction of cortical hormones acting on

carbohydrate and electrolyte metabolism supervenes in the latter and that of sex hormones in the former.

Clinical Characteristics

The adrenogenital syndrome in the broadest sense of the term comprises all conditions in which abnormal changes in the sexual sphere are referable to organic or functional disturbances in the adrenal cortex². In the narrower sense as employed here, the syndrome refers to true masculinization of the female as opposed to pseudo-masculinization of Cushing's syndrome. In the former the features of positive protein balance and increased strength are arraigned against the negative protein balance and muscular weakness of the latter.

The adrenogenital syndrome is seen far more frequently in females. The signs and symptoms will depend on the time of development of the adrenal disorder. When the lesion occurs in prenatal life, the picture is usually that of pseudo-hermaphroditism. In such instances the clitoris enlarges so as to resemble an hypospadias penis, the vagina is absent or rudimentary. Physical configuration, hair distribution and the psyche are masculine. The internal genitalia, uterus, tubes and ovaries remain infantile³.

If the onset occurs later in prepubertal life, the masculinization is usually less complete. Precocious puberty with enlargement of the clitoris and labia majora, appearance of pubic hair and hirsutism may occur. Sometimes breast growth and menstruation may be found. The powerful muscular development seen in male precocity, "the infant Hercules" type, is not seen in the female though milder degrees may be observed⁴.

When the syndrome becomes established in adults after normal puberty, hirsutism, amenorrhea, lowering of pitch of voice, enlargement of the clitoris and increased muscular strength, i.e., true virilism, sets in.



Figure 1. Profile view Case I showing the masculine form, receding alopecia of scalp and marked hirsutism of face, arms, legs and trunk.

In the adult man the disease is rare and then the tendency is more frequently toward feminization, with gynecomastia and genital atrophy rather than toward increased virility⁵.

Differential Diagnosis

Adrenogenital syndrome is in many ways the exact antithesis of Cushing's syndrome. In this syndrome the excess corticoids instead of converting proteins into sugar, conserve protein and facilitate growth. Sugar metabolism is usually not disturbed. Obesity may or may not be present. Hypertension is usually absent. In Cushing's syndrome the signs and symptoms are similar to that



Figure 2. Intravenous pyelogram, Case 1, showing the right kidney pushed downward and rotated by tumor above.

of Cushing's disease. The fundamental disorder is in the adrenal in both, but in the former it is intrinsic while in the latter it is due to excessive pituitary stimulation of the adrenal. In Cushing's disease as in Cushing's syndrome the main physiologic disturbance is one of hypergluconeogenesis. The hirsutism is usually not attended by other signs of true virilism such as enlarged clitoris or voice changes. It is true, however, that in some instances there is tremendous overlapping of the syndromes and mixed cases of virilism and Cushing's syndrome have been observed. In general some signs and symptoms that aid in differentiation between Cushing's syndrome and adrenogenitalism are the muscular weakness and pseudovirilism of the one and the increased strength and true virilism of the other. However, when the underlying pathology is due to adrenal carcinoma, differentiation may be exceedingly difficult, since weak-

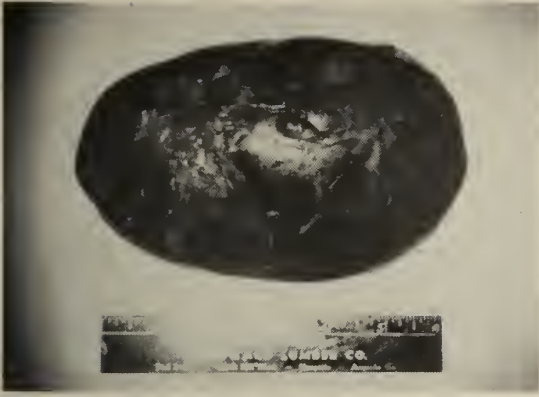


Figure 3. Unopened tumor removed from Case 1.



Figure 4. Tumor removed from Case 1 after splitting tumor in half.

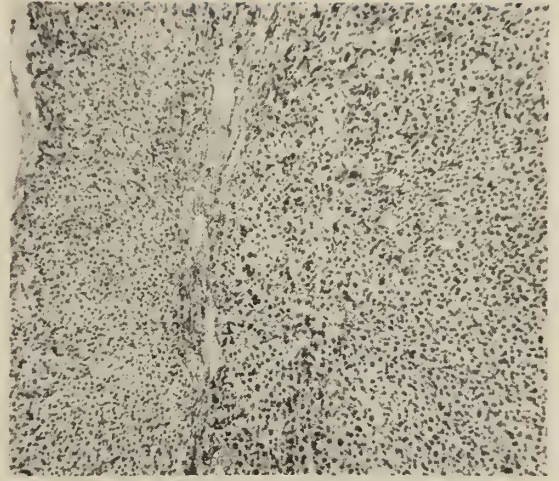


Figure 5. Low power photomicrograph tumor removed in Case 1. Normal adrenal tissue on left, neoplasm on right.

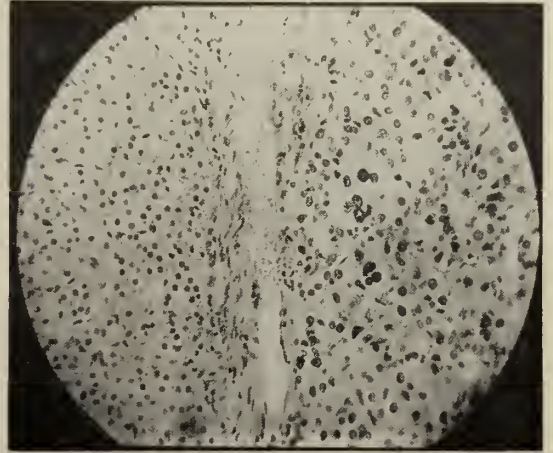


Figure 6. High power photomicrograph tumor removed in Case 1. Normal adrenal tissue on left, neoplasm on right.

ness and ultimate emaciation become common denominators of both syndromes.

True virilization may occur in arrhenoblastoma and hypernephromas of the ovary and differentiation may be difficult unless a palpable tumor of the ovary is present.

Diagnosis

Aids in diagnosis are glucose and insulin tolerance tests. Insulin resistance and decreased carbohydrate tolerance point to the involvement of the carbohydrate regulating factors of the adrenal. Urinary assays for 17-ketosteroids are important. They are increased in the adrenogenital syndrome and values may range from 40 to 120 mg. per 24 hour specimen and higher. In pure unmixed cases of Cushing's syndrome the 17-ketosteroids are normal or slightly increased, but the 11-17 corticoids are increased. Perirenal insufflation and pyelography may

prove of value in locating suspected adrenal tumors.

Therapy

Surgical intervention by removal of the adrenal tumor or bisecting the hyperplastic adrenal gland may be resorted to. Many of the symptoms usually disappear with restitution toward the norm.

Two case studies are presented to show some of the differential points in the diagnosis of adrenogenital syndrome (Case 1) and Cushing's syndrome (Case 2).

REPORT OF CASES

Case 1. A single woman of 40 years was first seen in October 1949 when her complaints were general weakness, fatigue and masculinization. Menses had appeared at 12; they were scanty and irregular through her high school period; in her college years the amount of flow was normal but the interval irregu-

Date	Total 17-keto,
1949	
11-14	1149 mg.
11-25	1227 mg.
1950	
1-3	16.6 mg.
1-4	14.1 mg.
1-5	19.1 mg.
1-6	10.2 mg.

Figure 7. 17-ketosteroid assays preoperatively and post-operatively in Case 1.



Figure 8. Profile view Case 2 showing extreme degree of obesity.

lar. In her last college year (1928) she had an almost constant discolored discharge requiring the constant use of a guard and that summer had a single excessive period lasting ten days. She was treated all through the summers of 1928 and 1929 by some type of injection which failed to restore normal menstrual function. Thereafter only occasional spotty bleeding occurred at irregular intervals until February 1949. Hot flushes had made their appearance two years earlier

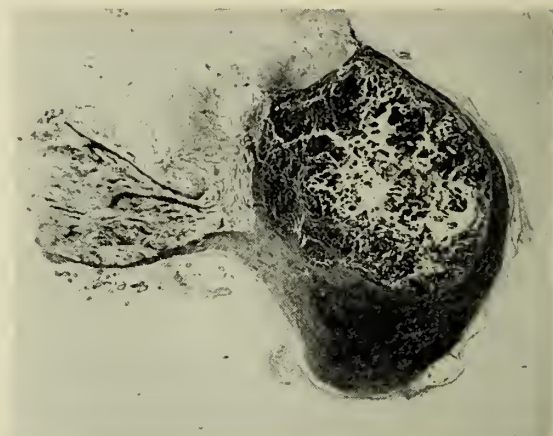


Figure 9. Photomicrograph pituitary tumor removed in Case 2.

but had never been marked. Excessive hair growth started 20 years ago and had not previously been considered as a factor in her problem. Physical examination showed a slender, well developed, but undernourished female, presenting excessive hirsutism of face, arms, legs and abdomen and receding alopecia of the scalp. The blood pressure was 128/92. The abdomen was below the plane and there was a suggestion that the right kidney was low. The pelvic examination showed a moderate enlargement of the clitoris, a nulliparous outlet, a small clean cervix with an open os, a miniature fundus and normal adnexa. Laboratory examinations showed normal blood, urine and kidney function tests. The basal metabolism was plus 10.4 per cent. The 17-ketosteroid determination (urine) indicated 1227 mg. per 24 hour specimen. The insulin tolerance test showed insulin sensitivity. The eosinophil response to adrenalin was good, falling from 150 to 50 in 4 hours. Intravenous pyelograms showed the left kidney normal, the right kidney pushed down and rotated by an apparent tumor existing above the kidney. Perirenal air studies showed the left side to be normal and that an adrenal tumor 10 cm. in diameter existed on the right, the long axis dimension being obscured by the liver shadow. At operation December 29, 1949 (R.H.C.) through a lumbar incision which removed the twelfth rib, the adrenal area was exposed and an encapsulated tumor 8 by 10 by 20 cm. in size was completely enucleated and the wound closed anatomically without drainage. The pathologic report (Dr. Edgar R. Pund) stated: "Solid carcinoma of the cortex of the suprarenal. The neoplasm arises in one portion of the suprarenal gland, the uninvolved portion being attenuated and measuring 9.5 by 5 cm. and varying in thickness from 0.1 to 0.8 cm. The neoplasm forms an encapsulated mass weighing 720 grams and measuring 15 by 10 by 8 cm.; while most of the cells of the neoplasm are fairly well differentiated, there are numerous clusters of cells in which the nuclei are increased in size, hyperchromic and, in these areas, there are many multinucleated giant cells." Convalescence was uneventful and early in February 1950 she had gained 12 pounds in weight, showed a return of feminine characteristics, a disappearance of hair from face, extremities and abdomen, and a decrease in the size of clitoris. The vaginal smears which were atrophic before operation became mature one month following. Two normal menses have occurred since operation at monthly intervals, each of 4 day duration, the first such normal menstrual flow to occur in 20 years. Just prior to the onset of the last period suction curettage revealed an ovulatory secretory endometrium. She returned to her vocation of teaching school on February 1, 1950.

Case 2. A housewife of 26 was first seen in July 1946. Amenorrhea had set in one year after the birth of her last child in May 1940. Since then her weight had increased considerably, hypertrichosis of arms, legs and trunk had arisen. Headaches were constant. Physical examination showed a large, overweight female, markedly obese. Weight 222. Blood pressure was slightly elevated 140/100. Facial hirsuties, shaves daily. The abdomen showed many striae. Pelvic examination showed slight enlargement of clitoris, but otherwise normal. The vaginal smear was atrophic (castrate smear). The endometrium (suction curettage) was atrophic. Glucose tolerance test indicated moderate decreased glucose tolerance (mild diabetic curve). Insulin tolerance test showed definite insulin resistance. Red blood cells 5.1 millions. Hemoglobin 16 grams. 17-ketosteroids showed average 31 mg. per 24 hour specimen (normal 7-14). Roentgenologic studies indicated a mild osteoporosis of spine, a normal sella, and perirenal insufflation showed an enlarged left adrenal gland. Operation (Dr. J. H. Sherman) was performed March 1947 and one-half of the left adrenal, which was twice the normal size was removed. Pathologic study of the removed tissue was suggestive of adrenal hyperplasia. Postoperatively pneumonia and subdiaphragmatic abscess developed and death took place. Postmortem examination revealed an early basophilic carcinoma of the pituitary gland.

Summary

We have presented the etiology and symptomatology of the adrenogenital syndrome in contrast to Cushing's syndrome and illustrated these differences by cases of each.

REFERENCES

1. Haymaker, W., and Anderson, E.: The Syndromes Arising from Hyperfunction of the Adrenal Cortex, *Internat. Clin.* 4:245, 1938.
2. Wintersteiner, O.: The Adrenogenital Syndrome, *Glandular Physiology and Therapy*, 1942.
3. Melicon, M. M., and Cahill, G. F.: Adrenal Cortex in Somatosexual Disturbances in Children, *J. Clin. Endocrinol.* 10:12, 1950.
4. Novak, Emil: *Gynecology and Female Endocrinology*, Boston, Little, Brown & Co., 1941.
5. Wilkins, L.: *J. Clin. Endocrinol.* 8:111, 1948.

THE COMMON TUMORS OF THE GENITO-URINARY TRACT—CLINICAL ASPECTS

ROBERT W. McALLISTER, M.D.

Macon

Cancer of the urinary tract is on the increase. Approximately 200,000 persons will die of cancer in 1950, and of these 22.7 per cent will die of malignant disease of the genito-urinary tract. It follows then that the urologist must treat approximately one of every four cancer patients.

The increase in incidence of cancer of

the genito-urinary tract is due to increased individual life expectancy and to the increased total population of the United States. Life expectancy at birth increased from 46 years in 1911 to 67½ years in 1950, and the total population of this country has increased from 76 million in 1900 to an estimated 151 million in 1950.

The three most common sites of urinary tract cancer are the prostate gland, the bladder and the kidney (Table 1). Cancers of the testis, penis and ureter are rare only by comparative incidence. Most urologists have occasion to treat a moderate number of these tumors during their careers.

Histologically the most common malignant tumors occurring in the three common sites are adenocarcinoma of the prostate gland, papillary carcinoma of the bladder and the clear cell carcinoma of the kidney, or the so called hypernephroma. Cancer of the prostate gland is the leading cause of death in this group of tumors, followed in order by cancer of the bladder and cancer of the kidney (Table 2).

The average age at the time of initial treatment of these tumors is as follows: Carcinoma of the prostate gland, 70.4 years;

TABLE 1
INCIDENCE OF CANCER OF UROGENITAL TRACT—BY SEX AND SITE—PER 100,000 POPULATION

Connecticut, Dorn¹, New York State² (Averages)

Genito-urinary Organs	Male Rate Per 100,000	Female Rate Per 100,000
Prostate Gland	21.5	
Bladder	11.1	4.4
Kidney	3.6	2.1
Testis	1.8	
Penis	.72	
Scrotum	Rate not available	
Other Unspecified Sites	Rate not available	

1. Rates of the white population of ten urban areas, 1937-1939, standardized for age on the 1940 total urban population of the United States.

2. New York State, exclusive of New York City.

Source: H. F. Dorn, U. S. P. H. S. Reprint No. 2537; E. J. Macdonald, Connecticut State Department of Health; New York State Department of Health, 66th Annual Report.

TABLE 2
THE THREE MOST COMMON SITES OF
UROGENITAL CANCER
Incidence and Death Rate—Both Sexes*

SITE	Male Rate Per 100,000	Female Rate Per 100,000	No. of Deaths 1946	Death Rate Per 100,000	Per Cent of All Deaths
Prostate Gland	21.5		10,616	7.5	5.3
Bladder	11.1	4.4	5,746	4.1	3.2
Kidney	3.6	2.1	2,900	2.1	1.6

*Death rate in United States—1946.

carcinoma of the bladder, 63.5 years and carcinoma of the kidney, 52.6 years (Table 3). With our present life expectancy being sixty-seven and one half years, these figures readily demonstrate why malignant disease of the urinary tract is becoming more common.

*Diagnosis of the Common Tumors
of the Urinary Tract*

Early diagnosis of the common malignant tumors of the urinary tract is essential, as it is with all other malignant neoplasms, if chance for cure is favorable. Until newer and improved methods of treatment for these cancers are developed, early diagnosis is our only means of increasing their cure rates.

All engaged in the practice of medicine should have some familiarity with the clinical features and treatment of cancers of the prostate gland, urinary bladder and kidney. Such knowledge is essential to the physician; otherwise, his suspicions may not be aroused when the signs and symptoms of these neoplasms are manifest. Of fundamental importance in the diagnosis of the common urinary tract tumors are a thoughtfully taken history, careful inspection and thorough palpation. When these prerequisites are followed by a thorough and complete urologic investigation, a definite diagnosis can usually be established.

The two most common symptoms of cancer of the urinary system are hematuria and

urinary tract infection. Pain and palpable masses are not uncommon symptoms. Loss of weight, weakness, anemia and unexplained fever are late symptoms of neoplastic disease of the urinary tract.

Grossly bloody urine always demands a prompt and accurate explanation. The same

TABLE 3
AVERAGE AGE AT TIME OF TREATMENT
OF UROGENITAL CANCER—THREE
MOST COMMON SITES

Site	Average Age of Patient	
	Male	Female
Prostate Gland	70.4	
Bladder	62.6	64.4
Kidney	54.5	50.8

is true for microscopic hematuria. Blood in the urine should never be treated only symptomatically. Gross bleeding from urinary tract tumors is seldom constant: weeks, months and occasionally years may elapse between episodes. Therefore, no opportunity should be lost to locate the source while the bleeding is still present.

Persistent urinary tract infection frequently accompanies urinary tract tumors, and likewise demands an explanation. An unqualified diagnosis of cystitis should never be made. The physician who does so is not only careless, but he subjects his patients to danger. Infection accompanying cancer of the urinary tract may occur early or late, depending upon the degree of ulceration and obstruction of urinary flow. Pain is usually a late symptom of urinary tract tumors. It may occur during the first few days of an infection, and also with the passage of ureteral blood clots. Rarely is pain produced by urinary tract mass alone.

*Laboratory Aids in the Diagnosis of the
Common Tumors of the Urinary Tract*

Occasionally small fragments of tumor tissue are passed from the bladder during micturition. Histologic diagnosis can frequently be made when this occurs.

Marked elevation of the serum acid phosphatase (normal 0 to 4 Bodansky units) in the male patient is usually diagnostic of carcinoma of the prostate gland with bone metastases. Normal acid phosphatase levels do not rule out the disease.

During recent years cytologic study of stained urinary sediments and prostatic secretions has attained considerable prominence. Reports are becoming more numerous in the literature concerning specific instances of early cancer detection of urinary tract tumors by this method. Carcinoma in situ of a kidney¹ has been detected and proved in the nephrectomized organ. Also, early prostatic carcinoma² has been detected by exfoliative cytology. We emphasize detection rather than diagnosis, because the percentage of error in exfoliative cytology is too great at the present time for this method to be considered a true diagnostic procedure. No kidney, bladder or prostate gland should be removed or operated upon as yet because of a positive exfoliative cytologic report, without additional evidence of the presence of cancer.

Carcinoma of the Prostate Gland

Carcinoma of the prostate gland, because of its silent onset and the infrequency of early diagnosis, has at all times presented a discouraging therapeutic problem.

Moore³ and Rich⁴, working independently, found from autopsy specimens that the incidence of carcinoma of the prostate gland is apparently 14 to 21 per cent in all men past 50 years of age. Baron and Angrist⁵, conducting a meticulous study of serial sections, have identified "occult" carcinoma of the prostate in 46 per cent of 50 consecutive autopsies on men past 50 years of age who died of other causes. The frequent occurrence of this disease in men past 50 years of age makes it imperative that we continue to seek improved methods both in early diagnosis and treatment.

Rectal palpation of a stony hard nodule or larger mass beneath the prostatic capsule is diagnostic of carcinoma of the prostate gland in 75 per cent of cases. However, prostatic calculi and inflammatory induration require differentiation. Twenty-five per cent of these malignancies develop within the lateral lobes nearer the urethra and are not palpable rectally.

If a solitary stony hard nodule is palpated rectally and is confined to the gland itself, and metastatic lesions are not found in x-ray films of the lumbar spine, bony pelvis and chest and if serum acid phosphatase levels are not elevated; perineal exploration is indicated. If frozen sections are diagnostic of cancer, radical perineal prostatectomy is indicated. In fact, and in theory, this is the only method of treatment of carcinoma of the prostate gland aimed at cure.

Unfortunately, treatment aimed at cure by radical perineal prostatectomy because of extension of the cancer beyond the capsule of the gland when diagnosed, is applicable to only three⁶ or four⁷ per cent of all patients suffering from the disease. We must educate the public to the value of regular and careful rectal and palpation of the gland in men over 40 years of age in order that more than this small percentage of patients with the disease will have a chance for cure.

Under present methods, 97 per cent or more of all patients with this disease are treated by palliation. Since Huggins⁸ in 1941 introduced androgen control therapy, the variations of this method have been the palliative treatment of choice in carcinoma of the prostate gland. There are four methods of treatment in androgen control therapy.

1. Primary bilateral orchiectomy.
2. Bilateral orchiectomy plus the administration of estrogens.
3. Administration of estrogens alone.

4. Administration of estrogens until "delayed failure" appears, then the operation of bilateral orchiectomy.

It has not been proved that bilateral orchiectomy is superior to estrogenic therapy. In patients whose prostate glands are inoperable from the point of view of cure of cancer, and who we think will be cooperative, we employ the use of estrogens until the hormone is no longer effective, and then resort to bilateral orchiectomy. It has been our experience that secondary castration not infrequently relieves patients of pain from metastases and certain other symptoms following estrogenic therapy "delayed failure". Estrogens are rarely of value in "delayed failure" following primary castration. We do not generally employ estrogens in inoperable carcinoma of the prostate gland until the patient develops pain from metastases, because its effects are usually beneficial for a limited period, varying from a few months to several years.

Transurethral resection of the prostate gland is the method of choice in relieving bladder neck obstruction in patients with this disease who are being treated palliatively.

It has not been proved that androgen control therapy effects a net prolongation of life. However, there are some who are of the opinion that a net gain of one year of life is added by this therapy. The one point all seem to agree upon is that androgen control therapy is affording to many elderly men periods of normal, or near normal, life that they might not otherwise have.

Cancer of the Bladder

Morphologically, 80 to 90 per cent of bladder tumors are papillary. The remainder are flat tumors, and usually with the pattern of transitional epithelium retained, except in the less common squamous cell tumors. Although the existence of benign papillomas cannot be denied, some prove to be malignant, and for this reason most urol-

ogists treat them as malignant, or at least potentially malignant tumors.

The over all mortality of bladder tumors is about 50 per cent. Only about 10 per cent of these tumors metastasize. The majority of patients with cancer of the bladder die of infections of the upper urinary tract.

Hematuria is the first and only symptom in 75 per cent of cases of early carcinoma of the bladder. Vesical irritation is the second most common symptom. A great opportunity for early recognition is offered in cancer of the bladder. Therefore, the physician should advise immediate urologic investigation for patients with hematuria.

More than two-thirds of bladder tumors are located on the posterior wall near or on the trigone. Tumors on the anterior wall are uncommon.

The management of the bladder tumor depends upon its site and its degree of infiltration. Investigation of the upper urinary tract should be done by excretory urography in all patients, if not contraindicated. Every effort should be made to determine the degree of infiltration of the bladder wall. This is best done by bimanual palpation with the patient under deep anesthesia⁹. It has been demonstrated that the potential curability of the patient decreases as the penetration of the bladder wall, by cancer, increases¹⁰.

Generally the small tumors, papillary or sessile, can be electrocoagulated cystoscopically with good results. Many of the larger papillary tumors can be resected transurethrally with the Stern-McCarthy resectoscope, followed by thorough coagulation of the tumor base. Suprapubic cystotomy with controlled electrocoagulation is the treatment used most frequently when tumors cannot be destroyed transurethrally.

The implantation of radium alone, either in needles or as radon seeds, has proved to be inadequate as a method of cure in the treatment of bladder cancer. Roentgen ther-

apy alone, aimed at cure, is ineffective except in rare instances, and should not be employed. We feel that external roentgen therapy is of value following coagulation or segmental resection of malignant tumors of the bladder on the theory that microscopic implants may be destroyed, thus possibly preventing recurrent growths.

Segmental resection of the bladder wall may be successfully used in removing tumors involving the dome and upper wall of the bladder.

Total cystectomy with uretero-intestinal anastomosis is sometimes the only method of cure in cancer of the bladder; particularly in instances where malignant tumors infiltrate the trigone or prostate gland; cases in which numerous benign or malignant tumors exist to such an extent that most of the bladder wall would be destroyed if electrocoagulation were employed as a method of treatment. Radical surgery is also indicated in instances where electrocoagulation is likely to produce ureteral obstruction, particularly if bilateral. This method of treatment should not be used when less radical procedures will suffice, because drainage of urine through the bowel is not physiologic, and also because of the constant threat of upper urinary tract infection.

It must be stated that in all patients upon whom total cystectomy is not done, routine cytoscopic inspection should be done at least two to four times yearly to rule out the presence of recurrent tumors.

Cancer of the Kidney

Cancer of the kidney occurs during infancy and aging adult life. In infancy there occurs the highly malignant renal embryoma or Wilms tumor, which is considered to be the second most common cancer of infancy and is fatal in more than 90 per cent of cases. Not more than 55 five year survivals have been reported. In middle aged or elderly adults there occurs the various epi-

thelial tumors of the kidney, which may arise from parenchymal cells, or from the mucosal surface of the emptying portion of the kidney.

The Wilms tumor usually is discovered late by a parent or nurse who palpates or notices an abdominal mass. Usually there is no symptom other than the presenting mass. Hematuria is rare.

The Wilms tumor initially is highly sensitive to x-radiation, and frequently can be reduced to one third its size noted at the time of diagnosis, by this preoperative therapy. After maximum reduction in size of the tumor by x-ray therapy is attained, nephrectomy should be done, if no demonstrable metastases have been noted. If possible, ligation of the renal pedicle and other renal vessels should be done before the kidney is mobilized.

Most agree that preoperative roentgen therapy followed by nephrectomy, and subsequently extensive postoperative irradiation, constitute the treatment of choice for this type of growth.

The epithelial growths of the kidney in the adult patients form a complex and confusing group of tumors. However, excluding mixed tumors, a rather simple classification of the malignant epithelial tumors of the kidney in the adult is as follows:

Renal Parenchymal Tumors

1. Renal celled carcinoma
 - a. Clear cell carcinoma (hypernephroma) 78 per cent.
 - b. Granular cell carcinoma.

Cancer of the Renal Pelvis (9 per cent)

1. Papillary carcinoma
2. Squamous cell carcinoma
3. Undifferentiated carcinoma

The diagnosis of renal neoplasms is made in the majority of instances on the basis of a history of hematuria or persistent infection and suggestive pyelographic evidence. I wish to emphasize the importance of repeating urographic studies when upper urinary

tract tumors are suspected. Constant urographic filling defects in the renal calyces, pelvis and ureter are of particular significance when neoplastic disease is strongly suspected. When possible, urographic studies should be repeated until neoplastic disease is diagnosed or definitely ruled out.

The diagnosis of early renal neoplasms must on occasions be based on suggestive rather than positive evidence. When there is strong presumptive evidence of renal tumor, exploration is indicated. Needless renal exploration is rare when a conscientious and intelligent effort has been made to establish a diagnosis of tumor.

X-ray therapy, either preoperative or postoperative, is of questionable value in regard to renal parenchymal tumors. Irradiation is considered to be of no value in the treatment of malignant tumors of the renal pelvis. The treatment of choice in patients with renal celled carcinoma is primary nephrectomy. The clear cell renal carcinomas have a much lower percentage of recurrences than do the granular or mixed tumors.

The treatment of cancers of the renal pelvis, whether papillary or sessile, differs from the treatment of renal celled carcinoma, in that complete nephro-ureterectomy should be carried out, including the intramural portion of the ureter, if the best results are to be attained. This is true because of the tendency of this type of tumor to recur in the ureter, if the ureter is not removed completely.

Summary and Conclusions

1. Cancer of the urinary tract is on the increase. Approximately 23 per cent of total cancer deaths are due to malignant disease of the urinary tract.

2. The common sites of urinary tract tumors, as they occur in order of frequency, are the prostate gland, the bladder and the kidney.

3. Histologically the most common malignant tumors of the urinary tract are adenocarcinoma of the prostate gland, transitional cell papillary carcinoma of the bladder and renal celled carcinoma (clear cell type—hypernephroma).

4. Early diagnosis is our only hope, using present methods of treatment, of increasing our percentage of cures.

5. In a general manner the various types of treatments of the common urinary tract tumors have been discussed.

BIBLIOGRAPHY

1. Foot, N. Chandler, and Papanicolaou, G. N.: Early Renal Carcinoma in Situ; J.A.M.A. 139:356, 1949.
2. Albers, Donald O.; McDonald, John R. and Thompson, Gershon, J.: Carcinoma Cells in Prostatic Secretions, J.A.M.A. 139:299, 1949.
3. Moore, R. A.: Morphology of Small Prostatic Carcinoma, J. Urol. 33:224, 1935.
4. Rich, A. R.: Frequency and Occurrence of Occult Carcinoma of the Prostate, J. Urol. 33:215, 1935.
5. Baron, E., and Angrist, A.: Incidence of Occult Carcinoma After Fifty Years of Age: In Cancer of Prostate, Arch. Path. 32:787-793, 1941.
6. Young, H. H.: The Radical Cure of Cancer of the Prostate, Surg., Gynec. & Obst. 64:472-484, 1937.
7. Barringer, B. S.: Prostatic Carcinoma, J. Urol. 35:616-620, 1935.
8. Huggins, C., and Hodges, C. V.: Studies on Prostatic Cancer I. The Effect of Castration, of Estrogen and of Androgen on Serum Phosphatases in Metastatic Carcinoma of the Prostate, Cancer Research 1:293-297, 1941.
9. Jewett, H. J.: Carcinoma of the Bladder: The Importance of Recto-Abdominal Palpation Under Anesthesia in the Selection of Cases for Total Cystectomy, J. Urol. 49:34, 1943.
10. Jewett, H. J.: Infiltrating Carcinoma of the Urinary Bladder: Diagnosis and Clinical Evaluation of Curability, South. M. J. 39:203-208, 1946.

700 Spring Street, Macon.

DISCUSSIONS

DR. C. F. HOLTON (Savannah): Mr. President, about the only thing I can discuss is Dr. Semans' paper on trauma. He confined it mostly to injuries to the urethra. About the best discussion I could give would be to speak about the urologist.

On the general subject of trauma about the pelvis, damage to the urethra should be suspected in all cases, and ruled out. It is simple enough to insert a small soft catheter into the bladder, and if the catheter goes in without trouble you do not have a rupture of the urethra.

There is nothing more distressing and more dangerous to a patient than an undiagnosed urethral rupture. Certainly if it goes untreated for a day the patient is going to become infected and will have a prolonged hospital stay.

Any trauma about the pelvis especially should be x-rayed freely, not only the pelvis but the dorsal and lumbar spine. There is nothing more embarrassing to the doctor than to have an x-ray of the pelvic bones made and to tell the patient he has not been damaged, and then, two or three weeks later, find that he has a compression fracture in the thoracic spine. I have seen many such cases.

I have a case of a woman who was thrown out of the back seat of an automobile to the floor without much trauma and apparently was uninjured, yet she had a marked compression fracture in the thoracic spine.

Just last week, to illustrate what can happen in these traumatic cases, we had a colored man brought

to the Central of Georgia Hospital, in Savannah who had been crushed by a truck. Examination at first appeared to show only a rather trivial injury, but when we put him into the operating room under anesthesia, and by that time he was in considerable shock and we had to transfuse him, we found that his entire rear end had been turned out. That was the first time I had ever seen the urethra from stem to stern. It was completely dissected up, but fortunately not ruptured.

One could run a finger up and down the urethra, and the same with the rectum, but neither rectum nor urethra was damaged. Every nerve and muscle and bone, practically, in his pelvis could be demonstrated as if it were on an anatomical table.

Any traumatic cases warrant an immediate investigation by a doctor. Too many of us, called in the middle of the night to treat trauma, tell the family to put the person to bed and that we will see him the following morning. If we have trauma about the pelvis we should check the patient immediately, because if he does have a ruptured urethra six hours is entirely too late.

Thank you.

DR. H. D. ALLEN, JR. (Milledgeville): Mr. President and fellow physicians, I think we are to be congratulated that we have heard three such excellent papers. I did not have the opportunity to read Dr. Thigpen's paper, but I did have an opportunity to review Dr. Brawner's paper, and I am sorry he did not have enough time to give his paper in more detail. It certainly is a most exhaustive study in the investigation of the use of a new remedy which I think is rather unique in its pharmacologic reactions.

Here we have a substance that you can take into the system, unfortunately only by mouth. If we could give it to the patient hypodermically and give him a month's supply at one time, I think it would be much more effective. We have to depend upon the patient taking it every day.

It brings about a reaction that was already known before the medicine was discovered. At the time Dr. Jacobsen and Dr. Jens Hald ran into this reaction from their own personal experience, they were studying the drug as a vermifuge. It is a rather crude drug and is used extensively in industrial softening of rubber.

It was noted that the people handling this substance could not take much alcohol. They also found that Dr. Elmer Stotz of McLain Hospital in Boston, had done work showing that after the system gets so much alcohol in it the complete metabolism of alcohol breaks down, or the oxydation of alcohol to CO_2 goes through an intermediate stage in which a very toxic substance, acetaldehyde, develops in the blood.

These reactions that Dr. Brawner has observed so carefully and has diagrammed all can be reproduced by an infusion of acetaldehyde into the blood.

I think Dr. Brawner is to be congratulated particularly on the way he selected his material. He has given these patients the opportunity to take the medicine. His experience has been much more extensive than mine. I have had to limit my treatments to patients whose families too often wanted them to take it. They agreed to take it, and the relapses in the eleven patients I have treated have been practically 100 per cent. However, we are able to tell these people that we can do something for them, and that is worth a lot.

I read a paper on this and my final conclusion was that it was a good test of the patient's sincerity.

I have had no experience with hypnosis since I was a child, when I used to hypnotize chickens and rabbits, but I did come into contact with hypnosis later. Putting it through some special tests, we felt that a person

had to have a certain amount of dramatic ability to be subject to hypnotism, and that was the reason it was more successful on the stage than it was as a therapeutic measure.

I wish to congratulate Dr. McElroy for bringing to our attention the fact that we need to exercise care before giving electroshock, although electroshock is not particularly injurious to brain tumor and is used quite frequently in general paresis with good effect on the mental state of the patient after intensive penicillin or malaria treatments.

DR. NEWDIGATE M. OWENSBY (Atlanta): The presentation and organization of a paper is often indicative of its quality. Logical order, sustained relevancy and summarization should always be kept in mind in medical reporting. A good paper should read as well backwards as forwards, and the gist of it should be found in the last sentence. This has been accomplished in the papers we have just had the privilege of hearing.

We, in psychiatry, are attacking a vast amount of unknown, and are forced to wade through the muddy water of hypothesis much of the time. Therefore, every bit of light that can be cast on this unknown, every single fact that can be established out of hypothesis, is an achievement which we should all hail. The Drs. Brawner have sifted the current literature with rare discrimination and a fine sense of responsibility in an effort to determine the worth of Antabuse in alcoholism and their clinical and research implications is an excellent piece of scientific work which will receive universal recognition.

Dr. McElroy's paper reiterates the fact that psychiatry can be of value only to the degree that it advances in the great stream of medicine itself. However far it may explore distant horizons, its valid contributions inevitably seep back into that stream, leaving behind all work of questionable merit.

DR. RICHARD B. WILSON (Atlanta): The fate of the patient reported by Dr. McElroy was the result of my own diagnostic failure. I am still perplexed, after almost a year, and it is a problem that I haven't the answer to.

You will recall this man was presenting suicidal manifestations some months before the onset of headache. That certainly is not a symptom of a posterior fossa lesion. Recall, also, that he had no clinical signs of increased intracranial pressure. His disc margins were sharply defined, and he had a well developed physiologic cup. He had occipital headaches, nystagmus, and an unsteady gait.

The latter two conditions are consistent with a gross posterior fossa lesion, but it may be the result of toxic effect on these structures, such as we commonly see in acute alcoholism, barbiturate intoxication, and other sedations. This man admitted taking up to twelve empirin tablets daily, together with other prescription given him. Certainly there seemed to be the history of sufficient sedation to account for the nystagmus and unsteady gait.

To elaborate upon another patient we happened to see on the same ward, a few months later: a girl with intractable suboccipital headaches, a much more pronounced nystagmus than had the first patient. She was so ataxic that she could not stand, and she had very profound limb ataxia not manifested by the first patient. In this case, after sedation was removed, her nystagmus had cleared entirely within a week, as did her ataxia; and a diagnosis of hysteria was verified.

How these cases are to be differentiated, I don't know. I think we will have to conclude that any patient presenting symptoms or signs that conceivably might have an organic structural basis, who at the same time are over-sedated, must be taken off sedation before we can feel it is not structural.

CHARLES L. PRINCE (Savannah): Drs. Chaney and Greenblatt have presented a very concise and to the point discussion of two of our most perplexing problems: Cushing's syndrome, and the adrenogenital syndrome. He who solves the riddle of these two conditions will do a great service to medicine and to mankind.

In recent months, great strides have been made in the management of both of these baffling conditions, giving us hope that their ultimate complete solution is not too far away. The striking response of some cases of Cushing's syndrome to testosterone therapy is most gratifying. It was Albright's theory of the antagonistic action of the "S" hormone (Compound E, corticosterone) of the adrenal cortex to the "N" hormone, whose action is closely akin to that of testosterone in many respects, which led to the trial of the male sex hormone in the treatment of this condition. Recently, surgery has been used in cases of Cushing's syndrome due to cortical hyperplasia, and shows possible promise. Staged resection of both adrenals, with removal of approximately 90 per cent of all adrenal tissue has been performed in a number of cases with encouraging results. This latter work, however, is still much in the experimental stage, and postoperative management is time-consuming, difficult, and expensive, and the mortality is still high. In Cushing's syndrome due to tumor, the ultimate outlook is quite favorable, if the tumor is removed, unless an extensive malignant neoplasm is present. Fortunately, most tumors of the adrenal cortex are benign or of low grade malignancy and generally well encapsulated. Proper postoperative supportive therapy is most important after removal of a functioning adrenal cortical tumor, for under these circumstances the remaining portion of the adrenal glands is atrophic and time is required before it evidences adequate function to sustain life.

For patients presenting clinical syndromes known to be associated with hyperfunction of the adrenal cortex, the problem of differentiating between tumor and hyperplasia has been simplified, though not entirely solved, by methods of urinary assay. High excretory rates of the 17-ketosteroids usually indicate adrenal hyperplasia or cortical tumors, or interstitial cell tumors of the testicle. The latter is distinguished by the increased size of the affected testicle. The excretion of 17-ketosteroids in normal adults is 2.7 to 8.1 mg. in women and 3.4 to 15.0 in men every 24 hours. With this as a basis, estimation of the output of the 17-ketosteroids will distinguish adrenal cortical tumors from pituitary, ovarian or other conditions, but will not differentiate adrenal cortical hyperplasia from carcinoma, as both show an increased production of androgen. The 17-ketosteroids, however, can be separated into alpha and beta fractions. It appears that the alpha fraction arises from both adrenals and testes, but the beta ketosteroid comes only from the adrenal cortex. Adrenal cortical carcinoma may therefore be differentiated from hyperplasia by fractionation of the total 17-ketosteroids.

Cases of adrenogenital syndrome due to adrenal cortical tumors respond promptly and gratifyingly to surgical removal of the growth, and with gradual disappearance of all masculinizing signs. Unfortunately, however, the majority of cases of hyperadrenocorticism are not due to neoplasm, but to a hyperplasia of the androgenic zone of the adrenal cortex, which change is invariably bilateral. In my experience, surgery in this group of cases has proved to be of no benefit. I have removed one whole adrenal and half of the other without affecting the masculinization which has taken place, and even then, virilization progresses. No amount of estrogen will repress the androgenic effects that are being produced, even though only 25 per cent of the original adrenal tissue remains. In the past, therefore, surgery directed at the adrenals has been

practically useless. Most of these patients are female pseudohermaphrodites, and there has always been a great diversity of opinion as to how they should be handled, and whether they should be raised as males or females. In the cases that I have seen at an early age, I have advised almost invariably that they be reared as males, in spite of the fact that their internal sex organs are female. This we have done because we know that the excessive secretion of androgen will continue throughout life, since up to now we have lacked any substance which will successfully counteract the adrenal androgen. These female children develop a hoarse, masculine voice and torso, never menstruate, and never attain any breast development whatever. Plastic procedures to excise the vagina, lengthen and straighten the enlarged clitoris, and to construct a urethra the length of the phallus have resulted quite satisfactorily, and emotionally these patients have seemed happier under such circumstances as males.

Recent work by Dr. Lawson Wilkins of the Johns Hopkins Hospital, however, may solve this whole difficult problem of hyperadrenocorticism. He has found that the administration of cortisone in these cases results in rapid and marked regression of the masculinizing features, and apparently in complete subjugation of the adrenal androgen. In four cases, he reports excellent results, and his work may prove to be the basis of the solution of this heretofore hopeless problem. If so, numbers of children with congenital adrenal cortical hyperplasia, and many women with the same condition suffering from virilism will be relieved of their distressing physical and mental states, and a tremendous service will have been rendered.

Dr. McAllister has given us an excellent brief review of the neoplasms of the genito-urinary tract; of their incidence, signs and symptoms, and treatment. He has pointed out, and I should like to stress again the importance of a complete urologic investigation in the presence of hematuria, and in cases of persistent or recurrent urinary tract infection.

The incidence of cancer of the genito-urinary tract as reported by Dr. McAllister is amazing. I am sure that few urologists and fewer general practitioners have realized that almost 25 per cent of the deaths from cancer are attributable to the genito-urinary tract.

I should like to add briefly to Dr. McAllister's remarks concerning prostatic carcinoma for two reasons: first, because it is the most common malignant neoplasm of the genito-urinary tract, and is responsible for more deaths than all others combined, and, second, because I do not feel that the picture concerning the cure of prostatic carcinoma by radical surgery is as dark as he has painted it.

Radical perineal prostatectomy is the only method by which carcinoma of the prostate can be cured, and, in suitable cases, one may expect at least a 50 per cent five year survival rate. Dr. McAllister states that radical surgery is applicable in only 3.4 to 4.5 per cent of patients suffering from the disease. I cannot agree with this. In 189 consecutive cases reported elsewhere, I found radical perineal prostatectomy to be feasible in 9 per cent. In 713 cases of prostatic carcinoma seen at the Brady Urological Institute at the Johns Hopkins Hospital between 1938 and 1948, the operation was found to be applicable in 11.2 per cent. The chances for complete cure, therefore, are not too dim, if the lesion is discovered sufficiently early. It is mainly through careful routine, yearly rectal examinations by the medical man and general practitioner upon all men past 45 that more cases of prostatic cancer may be discovered sufficiently early for radical surgery to be feasible and curative.

Since Huggins first reported success in the partial control of prostatic carcinoma by orchiectomy and estrogenic hormone therapy, many urologists have felt that neither orchiectomy, estrogens, or the two in combination counteract completely all androgen secreted

by the patient. Many have postulated that the androgen which is not counteracted comes from the adrenal cortex, and that it is this androgen which is responsible for the fact that both estrogens and orchiectomy lose their beneficial effect after varying periods of time. As a matter of fact, adrenalectomy, and even bilateral adrenalectomy, have been attempted in such hopeless cases, and have resulted in a marked decrease in the 17-ketosteroid output of these patients. In view of Dr. Wilkins' recent work mentioned above, it will be extremely interesting to see the effect of castration and estrogens used in combination with cortisone in carcinoma of the prostate. Counteraction of the adrenal androgen by cortisone in prostatic carcinoma may yet prove to be another milestone in the treatment of this condition.

REFERENCES

1. Prince, C. L., and Vest, S. A.: *South. M. J.* 36:680, 1943.
2. Jewett, H. J.: *J. Urol.* 61:277, 1949.

VOCATIONAL REHABILITATION OF CARDIAC PATIENTS

JOSEPH C. MASSEE, M.D.

Atlanta

There are eight million persons in the United States suffering from some form of heart disease. It is important to consider some problems that concern this large segment of the population. Should they be kept at work or restored to work? Obviously if five per cent of our population is unable to work a tremendous loss of productivity results. Likewise an enormous economic burden develops in the care of such a large number of disabled persons. Taken as individuals it would seem desirable that every cardiac patient who can work should do so in order to increase his income and productivity, to improve his happiness and self respect, and to lift the burden of his maintenance from his family or community.

First the question arises: Can persons work if they have heart disease? The answer is definitely yes, in a large per cent of cases. A report of the third division cardiac clinic of Bellevue Hospital in 1944 included an occupational analysis of about 2000 patients who were attending cardiac clinics in New York City. The analysis showed that 84 per cent of 1019 males were working and a con-

siderable portion of the females were doing housework requiring physical effort at least equivalent to that required in most factory jobs. An earlier study had indicated that 65 per cent of 2000 unselected cases were performing some useful or productive work.

In each individual case the question of ability to work must be decided after a diagnosis is made following a thorough examination by a competent physician. The use of the American Heart Association's functional classification is then suggested.

Group 1. Cardiacs requiring no limitation of physical activity.

Group 2. Cardiacs requiring moderate limitation of physical activity.

Group 3. Cardiacs requiring marked limitation of physical activity.

Group 4. Cardiacs requiring complete limitation of physical activity, i.e., bed rest.

Having received a functional classification it then becomes desirable to be classified as to job requirements. Large industries often have work classification or job analysis experts who perform this function admirably. Where they can cooperate with industrial or plant physicians excellent results are achieved. This is demonstrated by the fact that in certain skilled trades absenteeism and loss of time from sickness is less among cardiacs than in unhandicapped workers. Also production quotas are higher and rejection of imperfect work is less. Of course this stresses the importance of assigning cardiacs to certain skilled jobs, since they can hardly be expected to perform the heavier laboring work.

It is just here that the State Department of Vocational Rehabilitation is doing such fine work. Any cardiac who can show need will be given a competent medical examination and functional classification. He will also receive a work classification and training in the type of skilled work which he chooses. The expense incurred in this work is repaid

*Vocational Rehabilitation Committee, Georgia Heart Association.

many times over by the increased income of the patients and the relief of the economic burden of caring for disabled persons. Many more cardiacs can be given this service than now receive it without taxing the facilities of the department.

The Committee of Vocational Rehabilitation of the Georgia Heart Association is trying to spread this good work by a study of the employment problems which arise with cardiacs in industry. Physicians throughout the State are being urged to attend courses and clinics offered by the heart association on problems and classification of cardiacs. In addition, a campaign is being conducted to educate the self-employed or home worker with cardiac limitation, such as housewives, in more efficient and less taxing methods of work.

Some of the larger industrial employers have instituted screening tests for new and old employees in an attempt to identify employees with cardiac defects. It is emphasized that this screening is to guide proper job placement and not for elimination of cardiacs. Proper tests should include a medical history of possible predisposing diseases or symptoms of cardiac disability, a physical examination, a fluoroscopic or x-ray examination of the chest, a urinalysis, a blood Kahn test and an electrocardiogram. With such an examination combined with expert job analysis and job placement, it is believed that industry will benefit by the employment of many persons now considered as employment risks, and that many now dependent will become self supporting.

Let us consider some of the problems which arise in the employment of cardiacs. The question of danger to the patient or to others is always raised. Cannot an attack of Adams-Stokes syndrome, severe angina pectoris, acute cardiac decompensation or cerebral vascular accident create a dangerous situation? The answer is obviously that

the danger from such an attack is greatest when heart disease is unsuspected. If cardiacs are properly screened and placed in jobs suitable for them these dangers are largely overcome.

In spite of the obviously greater safety for himself or others, a cardiac may oppose job placement for several reasons. Transfer to a more suitable job may mean a reduction in income or loss of seniority. In many cases such a change of jobs may come into conflict with union rules, which forbid a transfer of job which entails a loss of seniority or a reduction in income. Sometimes a transfer to a less strenuous job will cause jealousy among other workers who do not realize the cause of the transfer and think only that favoritism is being shown. In fact, it is the very invisible or intangible nature of the disability which causes the misunderstanding. If the patient had lost a leg or an eye the other workers could see the cause of seeming preference in job placement. The worker, on the other hand, would accept decreased income resulting from an obvious visible defect as a matter of course and even with gratitude that he was still able to do some work. After suffering a heart attack, however, a man faced with the necessity of supporting a family or meeting other demands on his income may actually try to minimize or hide his need for reduced physical effort and thus endanger himself and others. This is particularly true of heavy manual workers who have no skilled trade to fall back on. This points to the prime importance of a proper cooperation between the patient, his physician and the plant physician, nurse, or foreman, in cases of illness occurring among factory workers. A case in point is that of a man who has a cardiac infarction and was out of work for three months. Should he return to work with a statement from his physician simply that he had been ill and absence from work was

necessary, or should his sickness report be misleading or inadequate, great harm may be done. He may return to strenuous work too soon, thus causing harm to himself or inefficiency at his work. Even if his true condition is discovered it may take some time to find a job suitable to his condition or to give him training for a new job. All this means loss of time, loss of income, frustration and unhappiness for the worker. How much better it would be for the family doctor, who can prognose the patient's capabilities and needs, to contact the employer before the patient returns to work. Then a frank discussion with the plant physician, nurse, or foreman would enable suitable work to be planned in advance of the return to work. The worker and employer would be better served. This is one of many examples which might be given. It is meant to call attention to this most important aspect of the improved care of cardiacs in industry which will be attained when the physician, worker, and employer understand the reason for, and the manner of cooperation.

Certain insurance aspects of the employment of cardiacs should be considered. At present the incidence or development of heart disease is not considered compensable in industrial compensation insurance. However, any aggravation of existing disease may be compensable. The increase in insurance load entailed by such cases makes some employers hesitate to employ persons with known cardiac disability. Unfortunately, in some cases where industrial compensation has been denied, civil suits brought by patients, his family, or survivors have resulted in great expense to employers. Jurors untrained in medical and legal facts, and swayed by a natural sympathy for the unfortunate, have handed down decisions more charitable than just. It is hoped that popular knowledge may be increased so that right may be done more often. It has also been suggested that the inclusion of cardiac

disability in the second injury clause of insurance contracts may increase the protection of employers and more fairly provide for financial help in this form of disability.

Although not strictly in industry there is a large number of self-employed persons, particularly housewives, who suffer from heart disease and who must perform work comparable in physical effort to that done by many factory workers. It is the purpose of the Georgia Heart Association to help in this category of patients through a study of their work efficiency needs, and a program of education designed to meet these needs. The Vocational Rehabilitation Committee of the New York Heart Association with job analysis and work efficiency experts has prepared a booklet, "The Heart of the Home", which is available to all through application to the American Heart Association or its Georgia chapter. Any housewife will be helped by a study of this excellent pamphlet, but any cardiac will find a real means of relieving her load by planning and increased efficiency of performance of her household duties. A film with lecture accompanying it has been prepared by the American Gas Association based on this booklet. The film has already been shown on several occasions in Georgia and will be available through the Heart Association for use of local clubs, study groups, schools, etc., interested in health education. The Atlanta Gas Light Company, as a public service, is preparing a model kitchen based on this work to be used in connection with the film in teaching housewives.

In conclusion, attention is called to the importance of the vocational rehabilitation of cardiacs and the number of persons involved. The procedures of diagnosis, functional classification, job analysis and job placement are stressed. A plea is made for the cooperation of all concerned—the patient, the family physician, and the plant physician, or the employer in industry. Cer-

tain difficulties related to job transfer, the intangible nature of the disability, and the insurance implications have been discussed. In addition, job analysis and efficiency planning are offered to the self-employed or home workers.

REFERENCES

1. Bielowski, John G.: Employment Problems Faced by the Cardiac Patient, *J. Michigan M. Soc.* 48:1468-71 (Dec.) 1949.
2. Goldwater, Leonard J.: Heart Disease and Employment, *Rhode Island M. J.* 30:179-186 (March) 1947.
3. Kossman, Chas. E.: Goldwater, Leonard J., and De La Chapelle, Clarence E.: Selective Placement of Patients with Heart Disease in Competitive Employment, *Occup. Med.* 3:531-535 (June) 1947.
4. Crain, Rufus Baker, and Missal, Morris E.: The Industrial Employee with Myocardial Infarction, *Arch. Indust. Hyg. & Occup. Med.* 1:525-538 (May) 1950.

THE M.D. GOES PR

LAWRENCE W. REMBER
Chicago

It is good to be back in the beautiful and warm state of Georgia. In 1935, I came here as a Yankee Congregationalist. In 1936, I left as a Georgia Baptist. You succeeded further in raising my development level from a Northern church usher to a Southern church deacon. Consequently, I feel right religious being here in Georgia tonight, and also I feel very much at home.

I feel particularly at home to be on the same speaking program as your distinguished Governor and the distinguished Dean of your renowned State University's journalism school. "Herman," as we used to call him on the campus, was a senior at the University when I taught journalism and advertising for Dean Drewry. He was driving a yellow Packard roadster, as I recall, and he lived at the Sigma Nu house. I had the good fortune also of being invited to one of his father's famous barbecues in the neighborhood of Athens.

As for the Dean, I have always felt that he gave me a postgraduate education of the highest quality and value during my year of teaching and I shall always be indebted to him for it.

There is another reason why I feel at home tonight. Dean Drewry saw to it that I had the privilege of attending your famous Press Institutes. In addition, I did special news and feature assignments for both the Athens *Banner-Herald* and the Athens *Times*. On one of these I was asked to interview Dr. Hugh H. Young, of Baltimore, at the Georgian Hotel. He had come from Johns Hopkins and was on his way to Danielsville to dedicate a monument to Crawford W. Long. The question which I put to

Dr. Young was: "What are the 10 greatest boons to suffering humanity, and where does Dr. Long's discovery of anesthesia rank in the list?" Fortunately for me, he placed Dr. Long's discovery first, and even ahead of such medical landmarks as Louis Pasteur's germ theory of disease, Joseph Lister's introduction of antiseptic surgery, and F. G. Banting's discovery of insulin.

Radio, too, extended its hand of welcome during my stay in Athens. For sometime, I broadcasted nightly a news program over what is now Station WGAU. So you can understand why I am delighted that this audience is composed of so many men of the press and of the radio.

I consider the doctors of Georgia particularly my friends. Dr. James Edgar Paullin, as past president of the American Medical Association, has held the highest honor that medicine has to give. Doctors Allen H. Bunce and Eustace A. Allen, who will succeed him next January, of Atlanta, Charles H. Richardson, of Macon, and Benjamin H. Minchew, of Waycross, are most able representatives of your great state in the House of Delegates of the American Medical Association. This democratic body of 198 members establishes the policies by which the A.M.A. operates in the fields of scientific medicine and in the social, political, and economic areas of medical care. Dr. Edgar Shanks, who is most highly regarded as secretary of your state medical society, has been of tremendous help to me in acquainting me with the medical history and medical activities of Georgia. Dr. Stephen T. Brown, public relations chairman, Mr. Dick Eales, executive secretary in charge of public relations, and their committee are carrying this state swiftly forward in medical public relations, and I have had the good fortune of their friendship.

So all told, I feel that I am here to take part in one great, grand homecoming.

The title of my talk tonight is: "The M.D. Goes PR." It is a good thing for the doctor; it is a good thing for his special publics; and it is a good thing for the general public that the doctor is now out to cure social, economic and political health ills, as well as the ills of the individual human body.

Historically, the doctor has looked upon his publics as numbering only two; his own patients; and his fellow practitioners. He took proper care of these two publics by advancing his knowledge and technics of scientific medical practice and by observing faithfully the Hippocratic Oath and Principles of Ethics of his profession.

New and broadly different public relations problems were posed, however, when medical practice changed from the home and the "black bag" to the office, laboratory and hospital and when, spurred on by World War I, the tempo of America's industrialization speeded up greatly.

Five problems emerged which required public relations solutions well beyond the purely scientific and ethical areas of medicine:

First, all of the people, regardless of location or economic status, began to want the best of modern medical care.

Second, this modern type of medical care costs considerably more to deliver and purchase.

Third, the specialist does not function in the same personal role as a family doctor.

Fourth, modern facilities for delivering health care center around medical schools, and metropolitan areas draw doctors away from rural areas.

Fifth, the labor unions and government socializers moved into high gear in their political attacks against the voluntary system of medical care.

To cope with these problems, the American Medical Association has enlarged its program activities to include considerably more than its purely professional and scientific functions of improving medical education, approving hospitals for intern and residency training, passing upon the health value of drugs, foods, physical devices and appliances, distributing medical films, publishing medical journals, conducting clinical sessions, and educating the public in scientific health.

The A.M.A. has established, largely since 1940, a Council on Medical Service, a Committee on Rural Health, a Council on Industrial Health, a Council of National Emergency Medical Service, a Bureau of Medical Economic Research, a Washington Information Office, (headed by a doctor), a Department of Public Relations, and a National Education Campaign, to meet its growing public relations challenges.

The 48 constituent state medical associations, the District of Columbia, and the 2,011 component county medical societies have likewise made great strides toward solving the social and economic and political aspects of medical care problems. This substantial undertaking is supported wholeheartedly by the 148,000 doctors who pay national, state, and local dues and who in considerable numbers contribute much of their time and effort in committee and overall organization activities.

A few facts will paint the picture for you of how widely and thoroughly the state medical societies have organized for conducting a public relations offensive on medical care problems.

Public relations committees have been established by every state society in the nation during the past five years. These committees operate on a top policy level. They are chairmaned mostly by men who are either past presidents of the state society or presidents on the way up. Their members are doctors having sound experience in medical affairs, holding key responsibilities in the state society, and with an aptitude toward public understanding and action.

Each councilor district of the state has a public relations chairman, and each county society has either set up an active public relations committee or has been urged to do so.

Five years ago, it would have been difficult to find one state medical society with a specific public relations budget and specialized personnel to administer and execute a PR program. Today, 35 states, including your state of Georgia, have specific public relations budgets, and 11 more state medical societies appropriate funds as needed. Budgets range from \$1,000 in North Dakota to over \$100,000 in California and Michigan. Twenty-five states employ a full-time PR Director, usually trained in journalism or radio or some other key facet of public relations.

In the Southeast, Alabama has a 5-point program, South Carolina a 10-point program, and Florida an 8-point program that serve as guideposts on the road which the medical profession of these states have chosen to follow in their genuine effort to advance the health of the people. Your own state of Georgia is determined to make its public relations program a *positive* one, soft-peddling propaganda and emphasizing performance. This is most commendable.

Georgia and state associations throughout the nation believe that they have something better to offer the American people than socialized medicine. Some honest soul-searching has convinced the doctors that the public is demanding definite improvements in medical service and the correction of certain existing faults in the practice of medicine. The profession is also convinced that not all the good things that medicine is doing on behalf of the people are known to them. So the profession has the triangular task of being good, doing good, and letting the public know how good it is.

The American Medical Association assists the state societies in this task by sponsoring an annual National Medical Public Relations Conference and by issuing bimonthly a medical public relations news letter and exchange service called the "PR DOCTOR".

M.D. Charimen of statewide public relations committees and the executive secretaries and the PR Directors of state societies attend the conferences. The conferences deal with themes such as "Shooting at Common Medical Public Relations Targets," "A Program of Public Relations for State Societies," and "Effective Public Relations for County Medical Societies." Next year we plan to devote the entire conference to "Making the Best Use of Communication Media."

The *PR Doctor* reports on the progress being made in medical public relations by the state and county medical societies. The Exchange distributes case histories and actual working materials of the most constructive and resultful projects which have been conducted in the states and in the counties to meet health needs.

The January, 1950, issue of our PR Doctor recommended to the state associations and

county societies that they maintain and step up these public relations goals:

1. Establish a state grievance committee to hear and settle patient complaints.
2. Make sure that every community in the state has an adequate night and emergency call system.
3. Encourage doctors throughout the state to exercise constructive leadership in solving community health problems and in bettering local health facilities. This calls for increased cooperation with the local health council, public health unit, city government officials, school authorities, civic organizations, and so forth.
4. Strive to get doctors into rural areas and more family doctors graduated.
5. Promote in every way possible voluntary health insurance plans, and make sure that those who need medical care do not hesitate to seek it for financial reasons.
6. Consciously develop better relations with the press and radio. This calls for some type of press-radio conference on either a state or local basis, development of a joint code of cooperation, designation of official spokesmen for each county society, and every-day-of-the-year cooperation with reporters, editors and broadcasters in getting authentic stories and scripts and desired ethical pictures.
7. Encourage and help your Woman's Auxiliary in developing a strong organization and a constructive, community-served public relations program.

In the minutes that remain, I believe that it would be of interest to you to review briefly some of the solid accomplishments which are being made by the medical profession in improving medical care in these various public relations phases.

Three years ago a state medical society in the Rocky Mountain area announced that it was establishing an official agency of the society to which a dissatisfied patient could complain. The society since its founding, like other societies, had maintained a disciplinary body whereby one doctor could complain against another, but the idea of a patient complaining against a doctor through the machinery of the society was a new concept.

Within two years, five other state societies had set up similar committees to hear and act upon patient grievances. The A.M.A.'s Board of Trustees and House of Delegates last December recommended to state societies everywhere that they consider establishing such committees. A survey made recently showed that 34 states had done so, including the state of Georgia. In your own state, I understand that public complaints are handled by the governing council of the state medical association.

The pattern, under the committee setup, is generally this: Any patient who is dissatisfied with the service his doctor renders, or who feels that he has been overcharged, or who is dissatisfied for any other reason may take his complaint to the medical society. The Committee on Professional Conduct, as most of these patient-complaint committees are called, will consider his charges, discuss them with the physician concerned, and recommend a solution.

Experience has shown that most complaints arise out of misunderstandings that are quickly

and amicably settled. In cases involving fees, many difficulties occur solely because the physician and the patient neglect to discuss charges. Patients do not often realize that many tests and treatments are included under the simple heading, "For Professional Services Rendered." After a committee-arranged conference between doctor and patient, these troubles usually evaporate.

In those cases where a committee finds that a doctor has erred, very little difficulty is experienced in settling complaints. Committee after committee has reported to the A.M.A. that they have never had a doctor refuse to accept their recommendations. If more stringent discipline should be required, however, the medical society has the power to expel the physician involved from membership, or, if the charges warrant, can even go so far as to request revocation of his license by the state licensing board.

Many county societies, especially in the metropolitan areas, are establishing local committees to hear and resolve grievances as a further contribution to this public relations goal.

Goal number two which I mentioned is also being fast achieved. As you editors and broadcasters know, it is not the doctor who conscientiously gets up in the middle of the night or in the wee hours of the morning to answer a sick call that is featured in your headlines or on your newscast. On the contrary, it is the much rarer instance of the person who called 12 doctors and couldn't get a one to come that rates the 36-point gothic or 48-point bodoni display type or the top-notch commentator mention.

The profession nevertheless is determined that everyone shall be able to obtain a doctor 24 hours around the clock, regardless of whether it is nights, week-ends, or the doctor's day off.

In 1948, only 57 county medical societies reported that they had a telephone answering service and emergency medical call program. In a recent survey, out of the first 555 questionnaires returned, 237 county societies reported that they have emergency medical call programs and 140 county societies reported that they have a 24-hour telephone answering service. Eight county societies in Georgia reported such systems.

The doctors are becoming so conscious of the public relations necessity of responding to night and emergency calls, that recently in Shelby County, Indiana, seven doctors rushed to the scene of a bad automobile accident in answer to a call for doctors. *Time* reports in its August 28 issue that Dr. Leander Bryan of Rutledge, Tennessee, fumed and fussed for years over poor telephone service. He even went so far as to buy out the local telephone company so that he could keep in touch with, and serve, his widely scattered patients.

A number of you no doubt read the Clive Howard article, "The Best Doctor For You,"

in the August issue of the *Woman's Home Companion*. The writer makes as his main point the fact that a sick or injured person would have no difficulty in securing a doctor at night or in an emergency if he had previously established patient relationship with a family doctor.

The Toledo Academy of Medicine is currently conducting an advertising campaign to persuade Toledo citizens who do not have a family physician to select one. The Academy provides information and makes recommendations to anyone requesting assistance in selecting a qualified family doctor.

Goal number three of exercising constructive leadership in solving community health problems and in bettering local health facilities is well on the road toward accomplishment. The best instrument we know at present for improving community health is the Health Council. Community health councils are made up of key representatives of all of the professional and lay groups that are interested in, or are functioning in, the field of health. The solving of any community health problem is within the field of planning and of action of such a council.

Yesterday in Detroit, I attended a national conference on M.D. Participation in Health Councils, which was sponsored jointly by the American Medical Association and the Michigan State Medical Society. We were informed that 1,190 local health councils and committees have been organized among the 2,843 counties covered in the survey. Georgia reported 36 community councils.

State health councils have been formed in 31 states with the fullest support and participation of the medical profession. This amazingly rapid growth stems primarily from 1945. As Victor Hugo said: "There is nothing so powerful as an idea whose time has come." And apparently, the time for health council organization and activity has now come.

The philosophy behind the health council is that it enables all citizens to assume their proper responsibilities in bettering community health. Such improvement is not a matter for doctors alone, but for the whole community.

The medical profession is getting together also with educators and public health officers to improve school health. Every two years the American Medical Association sponsors a national conference on Physicians and Schools to which states send representatives from the three groups mentioned. These delegates go back home to apply what they have learned from an exchange of ideas and action case histories.

The doctors are striving to be good citizens in other ways, too. They are giving utmost support to civilian defense plans. Two-thirds of the 48 states now have active civil defense organizations, and remaining states are in the process of such implementation. The medical

profession is doing its best to bring about a proper balance between the requirements of the armed forces and the needs of local communities for adequate medical and health services in event of atomic or other devastating attack.

The fourth goal I mentioned was that of getting doctors into rural areas and more family doctors graduated. Much progress is being made toward these two highly desirable ends.

The American Medical Association has a most able Committee on Rural Health operating, and which is made up of nine physicians from different areas of the country, who work with an advisory group of laymen. State committees on rural health are functioning in 45 states. Their common aim is to help rural regions get adequate medical care.

Both the A.M.A. and the state societies operate placement services for bringing together communities needing doctors and doctors needing communities. The A.M.A. alone will handle 500 such requests this year.

The rural health committees are also encouraging communities to do more to attract doctors. People in some small towns get together and provide an office for a new doctor. In some places they arrange free rent for him in the early stages. In some others, they make loans to young doctors so they can open and equip suitable quarters. A few towns collected money, built clinics, and soon had doctors. The Hill-Burton hospital construction act, which the medical profession supported strongly, is providing over 1,000 hospitals, mostly in rural areas, so that students trained to practice modern medicine can have access to needed facilities.

Legislatures or state medical societies in 15 states have put up cash for scholarships or loans to help rural youths through medical schools. About 300 students are now using such aid. The sending of seniors out to spend some time with country doctors and the establishment of top-notch postgraduate programs designed to keep rural doctors up-to-date are also advancing medical care in rural areas.

Better distribution of doctors is combining with a bigger supply of doctors to solve two vital medical care problems. The medical schools have now a bumper freshman crop. Last year 70 class A medical schools had a total enrollment of 25,103 students. Thirty years ago, 70 class A medical schools had a total enrollment of only 12,559 students. More doctors will be graduated in the future than ever before.

While our general population is increasing at the rate of 12 per cent, our doctor population is increasing at the rate of 14 per cent. State legislatures are recognizing the need for appropriating more funds to manufacture more doctors, and private schools are intensifying their efforts in securing gifts and endowments for enlarging medical schools.

Furthermore, a great increase has occurred during the past ten years in the number of auxiliary personnel, as well as improvements in therapeutic drugs and in doctor and patient mobility. This has enhanced considerably the amount of medical service which any 1,000 physicians can render. It is reliably estimated that the increase in productivity per physician during the 1940's might have been as large as one third.

You can rest assured that the medical profession of America is determined to see to it that there are enough doctors to meet our nation's health needs.

Goal number five was to promote in every way possible voluntary health insurance plans, and to provide medical care by some means to everyone regardless of financial status. The enrollment of the American people in hospital and surgical prepayment plans has been absolutely phenomenal during the past few years. As of December 31, 66,000,000 Americans were budgeting their hospital bills in advance, 41,000,000 were doing likewise with their surgical bills, and 17,000,000 were financially protected against medical bills.

The primary purpose for which the Council on Medical Service of the A.M.A. was set up and for which state society medical service committees were formed was to promote enrollment of the people in either Blue Shield or private insurance company plans. Three years ago, for example, the Blue Shield Commission had only 16 member plans with 51 per cent participation by doctors. Today there are 71 member plans with 90 per cent participation of doctors in active practice. The major effort of the National Education Campaign of the A.M.A. directed by Whitaker and Baxter is aimed toward the rapid and complete enrollment of the American people in voluntary prepayment plans.

Goal number six in the public relations program of the medical profession is well illustrated by your being here tonight. During the current year, six state societies have held press-radio conferences, and many more will be held in the future. I am sure.

This meeting tonight is most laudable and will do much to increase mutual understanding and cooperation. Doctors traditionally have been schooled to avoid publicity, but they are becoming increasingly aware that nature abhors a vacuum, even though it is only an information vacuum, and that their story must be told.

The genuine desire of the medical profession to improve relations with you leaders of the fourth estate is reflected in the action of the House of Delegates of the American Medical Association in Atlantic City last year. Changes were voted in the Principles of Ethics which now make it ethical for a physician "to meet the request of a component county medical society or a constituent state medical association

to write, act or speak for the general readers or audiences."

An addition to the Code says further that "the adaptability of medical material for presentation to the public may be perceived first by publishers, motion picture producers or radio officials."

The code declares that "refusal to release the material may be considered a refusal to perform a public service, yet compliance may bring the charge of self-seeking or solicitation. It is recommended that the doctor be guided by his state or county medical society." The Principles, which are a moral guide to every physician and surgeon, were liberalized to serve the public which does not have ready access to medical journals, finds scientific terms hard to understand, and yet today is more interested in health and medical care information than ever before.

California, Colorado, Massachusetts and other state societies are working out codes of cooperation between doctors, hospitals, newspaper and radio stations. The medical society agrees to act as an information center and clearing house, to appoint publicity chairmen in each county to serve as a spokesman, and to cooperate in other ways. Hospitals agree also to name spokesmen, and like the society, to furnish such lists to press and radio.

Newspapers and radio stations agree to recognize the doctor-patient relationship and to respect the privacy and legal rights of patients, to strive for utmost accuracy in reporting medical news, and to exercise due editorial judgment in avoiding news which seeks solely to exploit the patient, doctor, or hospital.

The power and proper function of press and radio advertising in the public relations program of the medical profession is recognized in its nationwide advertising campaign which is being conducted this month. Its purpose is to help sell voluntary health insurance and to strengthen the basic American ideal of individual freedom, individual initiative, and freedom of opportunity.

Twenty-nine daily newspapers, 203 weekly newspapers, and 52 radio stations in Georgia will carry this advertising beginning October 8.

The seventh public relations goal of the medical profession, as I stated, is that of utilizing the great strength of the Woman's Auxiliary of the medical societies in conducting constructive, community-service health programs. You people in Georgia should take particular pride in the Woman's Auxiliary, since two of your own loved Atlanta women rose through leadership and service to the national presidency of the Woman's Auxiliary to the American Medical Association. They are Mrs. Eustace A. Allen and Mrs. Allen H. Bunce. Their great influences and marvelous contributions will carry on for

(Continued on Page 511)

PUBLIC RELATIONS DEPARTMENT

THE GEORGIA PLAN

By this time every doctor in the Association has received his copy of THE GEORGIA PLAN—our voluntary prepaid surgical insurance plan. The Public Relations Department urges every doctor to sign the Participating Agreement without delay, because this is a very important element of our public relations program and will, naturally, fail without wholehearted cooperation and support.

Needless to say, there will be many objections to the plan. An undertaking of this kind cannot possibly meet with everyone's complete approval. Dr. W. S. Dorough and the members of his committee recognize this fact. However, since the committee was first formed every element has been discussed and examined, and the plan as it now stands is believed to be the one best suited for a majority of the members and the companies that will handle it. However, one change has been made. Dr. Dorough and his committee have decided to include the words, "Does not cover prenatal and postnatal home and office care" under the heading "Obstetrics." This change was deemed necessary to eliminate misunderstanding on the part of policyholders.

The Georgia Plan was published in the April issue of this *Journal*, at which time comments were requested and received. These were considered and changes were made, where possible. Even with this effort to make the plan agreeable to all, the committee is aware that other changes may be required as future needs necessitate. This is but our first step—and a timely one—toward solving some of the financial problems of medical care.

Dr. Dorough has requested that anyone wishing to comment on the plan write a letter to him or to me and the observations will be discussed by the committee and action taken that is deemed necessary.

PUBLIC RELATIONS CONFERENCE

A statewide public relations conference has been called for December 17. It will be held at the Dempsey Hotel in Macon, and it will have two objectives.

First, the information received at the Third Annual Medical Public Relations Conference, to be held in Cleveland, Ohio, on December 3

and 4, will be passed on to those attending. Secondly, the organization of our public relations program will be discussed, and it is hoped that the delegates will not withhold any suggestion or recommendations they may have.

The Cleveland Conference, under the sponsorship of A.M.A., is to be devoted to county society public relations programs and the accomplishments of county societies in this field. Our meeting on Sunday, December 17, should be especially interesting to county P.R. chairmen and other officers engaged in this work; however, everyone is welcome. We hope the attendance will be good.

The conference will convene at 11:00 a.m. and will be interrupted for lunch at 12:00. It will re-convene at 1:00 p.m. and conclude at 2:00 in the afternoon.

As much time as possible will be devoted to open discussion concerning the public relations program and any problems that members may have. All phases of the program will be planned with brevity and effectiveness in mind.

NATIONAL EDUCATION CAMPAIGN

There have been no reports issued, as yet, concerning the effectiveness of the recent National Education Campaign advertising program, but it did serve to show that a majority of the newspapers in Georgia were sympathetic to the doctors' stand. A tentative analysis of the coverage given the campaign shows that over half of the State's newspapers carried editorials directed against socialized medicine.

From the clippings received in this office, and in discussing the subject around the State, it was noted that many county societies went all-out in support of the program. One society wrote and produced a number of radio shows in which doctors participated and another sponsored the broadcast of a local football game. Many societies purchased advertisements in community papers and bought radio time for announcements.

In order to compile a comprehensive report of the support given to the campaign here in Georgia, any clippings, notices or reports of activities in this connection will be appreciated.

RICHARD J. EALES,
Executive Secretary in Charge of
Public Relations Department.

THE JOURNAL

OF THE
MEDICAL ASSOCIATION OF GEORGIA

EDGAR D. SHANKS, M.D., Editor
478 Peachtree Street, N. E., Atlanta, Ga.

DECEMBER, 1950

ROSTER OF THE ASSOCIATION

Elsewhere in this JOURNAL will be found the 1950 roster of the Medical Association of Georgia. All members should examine the list and note if their names have been spelled correctly and if the addresses are correct. Errors should be reported to the Secretary-Treasurer, Dr. Edgar Shanks, 478 Peachtree St., N. E., Atlanta.

Further examination of this number of THE JOURNAL will reveal a list of the names that make up the Woman's Auxiliary to the Association.

REPORTS X-RAY SUPERIOR THERAPY IN BREAST CANCER COMPLICATIONS

X-ray excels hormones in the treatment of patients with inoperable, advanced breast cancer which has spread to bony structures, according to a report to the American Medical Association.

The report, submitted to the association's Committee on Research of the Council of Pharmacy and Chemistry, is made public in the November 13 *Journal of the A.M.A.* It was prepared by a group of San Francisco physicians associated with the San Francisco Hospital, Stanford University Service—Drs. Leo H. Garland, Milton L. Baker, William H. Picard, Jr., and Merrell A. Sisson.

This group is one of about 50 throughout the United States and Canada carrying on a collaborative study of steroids and their effect on breast cancer under the sponsorship of the Committee on Research.

A high percentage of cases of advanced mammary cancer develop complications in the form of bone metastases, a spread of the cancer to bony structures. This constitutes perhaps the leading source of distress and disability from the disease. In a majority of cases, there is pain and in many there are fractures. The question which the cooperative study is trying to answer is whether these bone metastases

should be treated primarily with x-rays, with steroid hormones or with a combination of both.

The San Francisco group reported on a study of 79 patients treated with irradiation and of 20 patients to whom hormones were administered after it was proved that the breast cancer had spread and that the problem was largely one of relief of pain in the final stages of life. They also reviewed similar reports by other groups.

The report said that about 70 per cent of such patients are relieved of pain by roentgen therapy, the relief lasting for from 50 to 100 per cent of their survival time in some three fourths of the cases.

In steroid hormone therapy from 40 to 75 per cent of such patients are relieved, the relief being more pronounced in those receiving androgens than those receiving estrogens.

"This relief lasts for a variable number of months, the average being less in our experience than that obtained with irradiation," said the report.

The average survival of the patients receiving irradiation was 12 months in the San Francisco study, measured from the time the spread to bony structures was established. With hormones, the average survival was 8.8 months—8.1 months for patients receiving androgens and 9.7 months for a smaller group receiving estrogens.

The report also pointed out that the steroid hormones produced more side effects and that some cases were considerably aggravated by therapy. Many of these effects, it added, could be controlled only by discontinuance of the hormone.

"In general, unpleasant side effects appear in about 5 per cent of patients treated with roentgen rays and in about 25 per cent of those treated with steroids," said the report.

Chief among these side effects were edema, hair growth, voice changes, an abnormally great rise of blood calcium, increased sex desires and other complications.

"Whether simultaneous irradiation and steroid hormone therapy increases or decreases, comfortable life has not yet been demonstrated," the report continued. "It is our impression that the two weapons ought to be used serially in patients with bone metastases and only when indicated, rather than simultaneously or in combination."

Commenting on the report, Dr. Walton Van Winkle of Chicago, secretary of the Committee on Research, said:

"The final conclusions must await evaluation of the studies now in progress. Nevertheless, it is believed that the data presented will be of interest and of value in further defining the role of steroid hormones in the palliation of advanced mammary carcinoma."

WESTERN UNION

1201

SYMBOLS

DL = Day Letter

NL = Night Letter

LC = Deferred Cable

NLT = Cable Night Letter

Ship Radiogram

W. P. MARSHALL, PRESIDENT

day letters in STANDARD TIME at point of origin. Time of receipt is STANDARD TIME at point of destination.
1950 NOV 21 AM 1 47

Telegraph YOUR



ANOTHER GROWING AMERICAN CUSTOM

AA069

A CA004 NL PD=CHICAGO ILL 20=

DR EDGAR D SHANKS=

SECRETARY MEDICAL ASSOCIATION OF GEORGIA 478

PEACHTREE ST NORTHEAST ATLA=

URGENT STEP UP COLLECTION AMERICAN MEDICAL ASSOCIATION DUES
STOP YOUR STATE 23 ON LIST WITH 69 PERCENTAGE PAYMENT OF
TOTAL MEMBERSHIP. UNLESS SIGNIFICANT INCREASE OF PAYMENT
MANY MEMBERS WILL BE DROPPED RESULTING IN REDUCED DELEGATE
STRENGTH. PLEASE DISCUSS IMMEDIATELY WITH YOUR BOARD AND
COUNCILLORS. LETTER FOLLOWS=

GEORGE F LULL=

THE COMPANY WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCERNING ITS SERVICE

MEMORANDUM TO CONSTITUENT STATE MEDICAL ASSOCIATION SECRETARIES

The collection of American Medical Association dues of \$25.00 for the year 1950 must be significantly increased if the American Medical Association is not to be confronted early in 1951 by a large withdrawal of members. Members who have not paid A.M.A. dues by December 31, 1950, will be considered delinquent and a letter will be sent from this office directly to each delinquent member during the first week of January 1951.

GEORGE F. LULL, Secretary.

INDUSTRIAL HEALTH CONGRESS TO BE HELD IN ATLANTA

Safeguarding of the health of workers will occupy the spotlight at the eleventh annual Congress on Industrial Health to be held in the Biltmore Hotel, Atlanta, Ga., February 26-27, 1951.

The event will be sponsored by the Council on Industrial Health of the American Medical Association, Chicago; the Medical Association of Georgia, the Fulton County Medical Society of Atlanta and the DeKalb County Medical Society of Decatur, Ga.

"This will be the first national meeting of its kind in the South," said Dr. Anthony J. Lanza of New York, chairman of the Council on Industrial Health. "It is a recognition of the importance of the South as an industrial area."

The two-day session will stress teamwork as the key to successful industrial health services. It also will bring out the interrelation of industry and agriculture. The importance of industrial health in civil defense in times of national disaster will be highlighted in panel discussions.

Other panels and round tables will consider the problems which face workers in various lines of industry and will review the efforts being made to find the answers. A panel arranged in cooperation with the Committee on Pesticides of the A.M.A. will discuss the health problems created by new chemicals designed to control pests.

One morning will be devoted to a panel on the heart case in industry, to be arranged by the Georgia Heart Association.

"The meeting will have as speakers and panel discussants leaders in industrial health, professional and nonprofessional, from all parts of the country," said Dr. Carl M. Peterson of Chicago, secretary of the Council on Industrial Health. It will attract medical, industrial, labor, agricultural and welfare leaders.

The council was established in 1933 to assist the medical profession in developing and maintaining a high standard of health in industry.

MEDICAL STUDENTS PLAN NATIONAL ORGANIZATION

Delegates representing student bodies in medical schools of the United States will meet in Chicago, December 28-29, to draft a constitution for the Student American Medical Association.

"The organization is to be a national association of medical students and is to be affiliated with the American Medical Association," it was announced by Dr. George F. Lull, Chicago, secretary and general manager of the A.M.A.

The meeting will be held in the A.M.A. headquarters, 535 North Dearborn Street. To be eligible to send a delegate, a student body must be organized along democratic lines and have duly elected officers, Dr. Lull said. All students

must be eligible to membership.

Dr. Walton Van Winkle, Jr., Chicago, secretary of the A.M.A. Committee on Research, is serving as temporary executive secretary of the student association during its pre-organization period.

Plans for the formation of such a student group were approved by the A.M.A. House of Delegates, the association's policy-making body, at the annual meeting in San Francisco last June.

INFANTS FARE WELL ON PLANE FLIGHTS

Mothers worrying about whether or not to take infants on plane trips can find comfort in the fact that scientific studies indicate that the average healthy baby reacts better to flight conditions than do adults.

Writing on "Information for Mothers" in the November issue of *Today's Health*, published by the American Medical Association, a medical consultant reports that "air sickness in infants is extremely uncommon."

In the case of the temporary disorder known as aero-otitis media, infants seem to fare much better than adults. The consultant explains it this way:

"In the infant the tube connecting the middle ear chamber and the throat is still short and straight. This tends to make its spontaneous opening and closing easier. In the adult the tube can be opened by chewing and swallowing movements, yawning or singing."

To forestall possible trouble with the infant, the parent (or attendant) is advised to waken the child and give him food or a bottle when the plane begins to descend.

"If the infant has a head cold," mothers were cautioned, "advice of the family physician should be sought. It may be desirable to apply special treatments to reduce swelling in the throat tissues."

During a flight in which altitude changes are occurring and a pressurized cabin is not provided, mothers are advised to keep the child from swallowing as little air as possible when he eats—frequent "burping" is helpful. The reason for this is that some gas expansion may occur in the stomach as high levels are reached.

1951 DUES

The 1951 dues to the Medical Association of Georgia will be \$15.00 and the 1951 dues to the American Medical Association will be \$25.00.

The *State Journal* and the *American Medical Association Journal* will be included in the 1951 dues.

The Medical Association of Georgia will hold its next annual session at the Bon Air Hotel, Augusta, April 17-20, 1951.

GEORGIA DEPARTMENT OF PUBLIC HEALTH

COXSACKIE VIRUS

Pathogen or Non-Pathogen

Dalldorf, one of the discoverers of the Cocksackie viruses, is quoted in discussion of a recent paper by Huebner and associates¹ as follows: "We are in the anomalous position of having discovered the cause of a disease before discovering the disease. In New York we have been intrigued by the association of the Cocksackie viruses with poliomyelitis. This is a puzzling problem not yet solved. For example, was the 1947 epidemic of "poliomyelitis" in Wilmington, Del., actually poliomyelitis, Cocksackie virus infection or both?"

Since the isolation of the first virus of the Cocksackie group by Dalldorf, Sickles and associates² during a small outbreak of poliomyelitis in Cocksackie, N. Y., it has been shown that this and the similar viruses now included in the group are probably widely prevalent parasites of man. As implied above, "the possible causal relationship between infection with these viruses and the various clinical illnesses previously associated with them is less well established"³.

Recently, Howitt³ has described the isolation of Cocksackie virus from human sources in Georgia and other southern states. Isolations have been reported by Howitt and others⁴ from feces, throat washings, blood, and tissues taken at necropsy.

The occurrence, possibly wide spread, of Cocksackie infection in Georgia, together with the interest implicit in this group of viruses for practicing physicians who have frequently to deal with, "short, unexplained fevers which physicians have been inclined in the past to lump under the undiagnosable respiratory infectious," makes it worthwhile to report briefly the present information on Cocksackie virus in Georgia. Current experience, while fragmentary, seems to be fairly typical of the experience reported in the rapidly developing literature on this subject. Huebner and associates¹ have reviewed this literature in a recent issue of the *Journal of the American Medical Association*.

In September 1949 there occurred in Emanuel County, Georgia, a brief outbreak of acute illness characterized by severe headache, high temperature, nausea and intractable vomiting. Nine patients in whom the disease first occurred were young males who gave a history of swimming, fishing, or working near the Ohoopsee River. Three of them were hospitalized, one of them with a provisional diagnosis of poliomyelitis in Indiana, to which place he had gone while in the incubation period of the illness, and two others because of severe dehydration. The other nine patients in this series were prostrated and acutely ill but did not require intravenous fluids and were not hospitalized.

A number of other illnesses which occurred about the same time in the affected area were included in the series on which follow up investigations were undertaken. While these investigations are still continuing, it can be said that only the first series of cases reveals a consistent pattern and that there has been no repetition of the outbreak after one year. At least one suspected case, which was included in the series before diagnosis could be made, developed clinical diphtheria which was confirmed by cultural findings and a virulence test. One patient, ill for more than a week without developing a rash, was found to have murine typhus when repeated Weil-Felix and complement-fixation tests were made.

For convenience in referring to the group under study, the term "Ohoopsee Fever" has been used. It is not intended thereby to imply that a new disease entity has been established but only to avoid the use of other descriptive terms which might be misleading.

Fecal specimens obtained from all but one of the original series of patients were frozen immediately and transported to the virus laboratory on dry ice. Blood specimens for neutralization and complement fixation tests were obtained from most of the patients, and sent directly to the laboratory without refrigeration. Since this work is still in progress and some of the data of more immediate interest have been included in publications by U. S. Public Health, Communicable Disease Center, Virus Laboratory personnel, no attempt will be made to describe in detail the results obtained. The following tabulation summarizes these findings:

Clinical Findings	Cocksackie Virus Positive			
	Total No. Persons	Virus Isolated	Positive Serology	Negative
"Ohoopsee Fever" Group	12	5	—	7
Diphtheria	1	1	—	0
Typhus Fever	1	1	—	0
Encephalitis—type unknown—2/10/50				
Meningitis (H. influenzae type B)—3/31/50	1	—	1	0
Unknown	4	2	—	2
Totals	19	9	1	9

From these findings it is clear that Cocksackie virus is not associated with the "Ohoopsee fever" syndrome alone but apparently occurs independently in the population. Huebner and associates in Maryland examined 296 of 308 persons residing in 80 households of the 84 in Parkwood, a small suburban community, in which eight persons in five nearly adjacent households had developed an acute febrile illness with which a Cocksackie virus was associated. It was found that 55 per cent (11 persons) were positive in the households in which clinical

illness had occurred and that 1.8 per cent (5 persons) were positive in households not known to be infected. It is not improbable that a similar study of the considerably more populous Georgia community affected would have yielded comparable results.

It is interesting to note that the Parkwood, Maryland episode and the Emanuel County, Georgia outbreak occurred within two weeks of each other. In Maryland only two out of eight patients vomited, although five reported nausea, whereas vomiting in the Georgia series was a pronounced symptom. Abdominal and thoracic pain, stiff neck, sore throat, general muscle pain and headache occurred in both series. In Georgia, the headache appears to have been far more severe than in the Maryland episode and only one patient had a stiff neck as compared with 50 per cent of the patients who manifested this symptom in Maryland.

It has been suggested that "Ohoopsee fever" bears a marked resemblance to the milder forms of leptospirosis in which jaundice does not occur. This suggestion is attractive in view of the apparent relationship of the Emanuel County episode to water and the Ohoopsee River swamp.

Despite the reservations which must be made with regard to Cocksackie virus as the etiologic agent of Ohoopsee fever, it should be pointed out that Huebner and associates¹ demonstrated Cocksackie virus, Group A, type 2 repeatedly from stools and once from sputum, though not from urine, throat washings, acute phase blood, and a biopsy specimen of gastrocnemius muscle in an acutely ill patient. This patient later manifested a decided rise in serum-neutralizing antibodies of type 2 virus.

In an earlier episode², a physician working with the virus developed a febrile illness of eight days duration. This was diagnosed as a "fever of unknown origin". Cocksackie virus was recovered from his feces and nasopharyngeal washings during his acute illness, and neutralizing antibodies first appeared during convalescence, reaching a maximum titer on the forty-third day. Infection of other laboratory workers has been reported and in each case a laboratory stain was isolated from throat washings and stools. Specific antibodies developed in these patients, with rising titers during convalescence.

Another one of the discussants of Huebner's¹ paper (Lennette) has pointed out that healthy carriers of poliomyelitis virus are known to exist and that the survey studies of the 1930's showed that 60 to 80 per cent of the normal population possessed antibodies to poliomyelitis virus. Despite these facts, "one could hardly say that the classic poliomyelitis virus is not pathogenic". In further discussion, Dalldorf pointed out that precise etiologic diagnosis is essential to a solution of the role of Cocksackie virus in human infection and that this will not

be difficult if stools and throat washings are taken during the acute phases of the illness. This will make it possible in many cases not only to recover the virus but also to classify it, which is highly desirable, since the Cocksackie group is large and may include viruses that cause different clinical manifestations.

Specimens of feces and throat washings should be frozen immediately after taking. Since these specimens must be shipped on dry ice, it is usually essential to make specific arrangement through Health Department channels for transportation and examination of specimens. Unfortunately, the facilities for virologic studies are limited and work cannot go beyond examination of specimens from outbreaks in which the occurrence of a group of similar cases might make possible the establishment of an association between a clinical entity and a specific etiologic agent. Prompt reporting of the presence of multiple cases of unexplained fever is therefore highly desirable. The problem of Cocksackie infection can only be solved through the assistance of clinicians, who alone have the opportunity to observe the development of conditions which would make epidemiologic studies productive.

JOHN E. McCROAN, JR., Ph.D.,
Division of Epidemiology.

REFERENCES

1. Huebner, R. J.; Armstrong, C.; Beeman, E. A., and Cole, R. M.: Studies of Cocksackie Viruses. Preliminary Report on Occurrence of Cocksackie Virus in a Southern Maryland Community. J.A.M.A. 144:609 (Oct. 21) 1950.
 2. Dalldorf, G., and Sickles, G. M.: An Unidentified Filterable Agent Isolated from Feces of Children with Paralysis. Science 108:61-62, 1948. Dalldorf, G.; Sickles, G. M.; Plager, H., and Gifford, R.: A Virus Recovered from Feces of "Poliomyelitis" Patients Pathogenic for Suckling Mice, J. Exper. Med. 89:567-582, 1949.
 3. Howitt, B. F.: Recovery of the Cocksackie Group of Viruses from Human Sources. Proc. Exper. Biol. & Med. 73:443-448, 1950.
 4. Sulkin, S. E.; Manire, G. P., and Farmer, T. W.: Cross-neutralization Tests with Cocksackie Viruses. Proc. Soc. Exp. Biol. & Med. 73:340-341, 1950.
 5. Editorial, J.A.M.A. 143:972-793 (July 15) 1950.
- Acknowledgements: This preliminary report is based upon the work of a number of persons, particularly: Dr. Alexander D. Langmuir and Dr. Beatrice Howitt, USPHS., Communicable Disease Center, Atlanta; Dr. Randall G. Brown, Dr. D. D. Smith, Dr. Henry W. Smith, Dr. Cuthbert E. Powell and Mrs. Emma K. Marshburn, R. N., Swainsboro; Dr. Leon I. Lanier and Miss Lillian Webster, R.N., Soperton, and Dr. Grady E. Black, University Hospital, Augusta.

TAKE THE JOURNAL HOME

When you take the bacon home, take *The Journal* too if the price of the bacon doesn't make you forget it. The little wife never gets to see *The Journal* as most of the husbands keep it at their office.

Your State *Journal* is a credit to any State Association and would keep any doctor abreast of medicine, medical legislation and news of his fellow members. But the wife has more time to read than her busy husband, so we suggest you take *The Journal* home and depend on her to keep you informed. Then she will have an opportunity to read what the Auxiliary members are doing.

Since the Auxiliary does not have a bulletin all its own, we will have to depend on our husbands to bring us *The Journal*.

MRS. BEN H. CLIFTON, Chairman
Editorials, Woman's Auxiliary.

OFFICERS AND COMMITTEES OF THE MEDICAL ASSOCIATION OF GEORGIA 1950-1951

MEDICAL ASSOCIATION OF GEORGIA

Officers and Committees 1950-1951

Officers

President	A. M. Phillips, Macon
President-Elect	W. F. Reavis, Waycross
First Vice-President	Leon D. Porch, Macon
Second Vice-President	T. A. Peterson, Savannah
Parliamentarian	Jno. W. Simmons, Brunswick
Secretary-Treasurer	Edgar D. Shanks, Atlanta

Delegates to A.M.A.

B. H. Minchew	Waycross
Alternate, W. R. Dancy	Savannah
Allen H. Bunce	Atlanta
Alternate, Walter W. Daniel	Atlanta
C. H. Richardson	Macon
Alternate, C. L. Ayers	Toccoa

Council

W. G. Elliott, Chairman	Cuthbert
Marion C. Pruitt, Clerk	Atlanta

Councilors

1. Lee Howard	Savannah
2. C. K. Wall	Thomasville
3. W. G. Elliott	Cuthbert
4. J. W. Chambers	LaGrange
5. Marion C. Pruitt	Atlanta
4. H. D. Allen, Jr.	Milledgeville
7. D. Lloyd Wood	Dalton
8. Sage Harper	Douglas
9. W. Bruce Schaefer	Toccoa
10. H. L. Cheves	Union Point

Vice-Councilors

1. Chas. T. Brown	Guyton
2. C. H. Watt	Thomasville
3. Guy J. Dillard	Columbus
4. Clarence B. Palmer	Covington
5. David Henry Poer	Atlanta
6. H. G. Weaver	Macon
7. M. M. Hagood	Marietta
8. Alton M. Johnson	Valdosta
9. D. H. Garrison	Clarksville
10. J. Victor Roule	Augusta

Executive Committee

A. M. Phillips, President	Macon
W. G. Elliott, Chairman, Council	Cuthbert
Edgar D. Shanks, Secretary-Treasurer	Atlanta

Honorary Advisory Board

W. S. Goldsmith	President, 1915-1916
Eugene E. Murphey	President, 1917-1918
J. W. Palmer	President, 1918-1919
J. W. Daniel	President, 1923-1924
Frank K. Boland	President, 1925-1926
C. K. Sharp	President, 1928-1929
Wm. R. Dancy	President, 1929-1930
M. M. Head	President, 1932-1933
C. H. Richardson	President, 1933-1934
Clarence L. Ayers	President, 1934-1935
James E. Paullin	President, 1935-1936
B. H. Minchew	President, 1936-1937
Grady N. Coker	President, 1938-1939
J. C. Patterson	President, 1940-1941
Allen H. Bunce	President, 1941-1942
James A. Redfearn	President, 1942-1943
W. A. Selman	President, 1943-1944
Cleveland Thompson	President, 1944-1946
Ralph H. Chaney	President, 1946-1947
Steve P. Kenyon	President, 1947-1948
Edgar H. Greene	President, 1948-1949
Enoch Callaway	President, 1949-1950

Scientific Work

W. C. McGeary, Chairman	Madison
Richard Torpin	Augusta
Thomas J. Ross, Jr.	Macon
Edgar D. Shanks	Atlanta

Public Policy and Legislation

C. C. Aven, Chairman	Atlanta
Jack C. Norris	Atlanta
James A. Johnson, Jr.	Manchester
T. F. Sellers	Atlanta
A. M. Phillips	Macon
Edgar D. Shanks	Atlanta

Medical Defense

Marion C. Pruitt, Chairman	Atlanta
B. H. Minchew	Waycross
Marcus Mashburn	Cumming
Edgar D. Shanks	Atlanta

Advisory State Board of Health

Edgar H. Greene, Chairman	Atlanta
C. L. Ridley, Sr.	Macon
J. C. Patterson	Cuthbert
R. K. Winston	Tifton
O. R. Styles	Cedartown
J. C. Brim	Pelham
J. W. Chambers	LaGrange
C. L. Ayers	Toccoa
D. N. Thompson	Elberton
B. H. Minchew	Waycross

Medical Education and Hospitals

G. Lombard Kelly, Chairman	Augusta
R. Hugh Wood	Emory University
Julian K. Quattlebaum	Savannah
Ernest F. Wahl	Thomasville
J. A. Thrash	Columbus
C. Mark Whitehead	LaGrange
L. Minor Blackford	Atlanta
B. T. Beasley	Atlanta
Charles B. Fulghum	Milledgeville
John T. McCall, Jr.	Rome
A. G. Little, Jr.	Valdosta
Marcus Mashburn, Jr.	Cumming
Sam M. Talmadge	Athens
C. H. Richardson, Sr.	Macon
Hervey M. Cleckley	Augusta
Albert F. Brawner	Atlanta
Edgar Boling	Atlanta

Abner Wellborn Calhoun Lectureship

James E. Paullin, Chairman	Atlanta
J. R. Broderick	Savannah
Eugene E. Murphey	Augusta
Frank K. Boland	Atlanta
Guy O. Wheelchel	Athens
J. Calhoun McDougall	Atlanta

Memorial Exercises

M. Preston Agee, Chairman	Augusta
L. D. Porch	Macon
J. C. Patterson	Cuthbert
George H. Lang	Savannah
Frank K. Boland	Atlanta
M. T. Edgerton	Atlanta

Medical History of Georgia

J. Calvin Weaver, Chairman	Atlanta
Frank K. Boland	Atlanta
Allen H. Bunce	Atlanta
T. F. Ahernrombie	Decatur
Eugene E. Murphey	Augusta
William R. Dancy	Savannah
McClaren Johnson	Atlanta

Orthopedics

J. Hiram Kite, Chairman	Atlanta
Fred G. Hodgson	Atlanta
Thomas P. Goodwyn	Atlanta
F. Bert Brown	Savannah
John I. Hall	Macon
Peter B. Wright	Augusta
W. A. Newman	Macon
H. Walker Jernigan	Atlanta
C. E. Irwin	Warm Springs

Lawson Thornton	Atlanta	Hoke Wammock	Augusta
C. G. Henry	Augusta	D. M. Bradley	Waycross
<i>Industrial Health</i>			
C. N. Wasden, Chairman	Macon	John Funke	Atlanta
J. Harry Rogers	Atlanta	J. J. Collins	Thomasville
Thomas P. Goodwyn	Atlanta	Max Mass	Macon
T. V. Willis	Brunswick	<i>Advisory Woman's Auxiliary</i>	
L. M. Petrie	Atlanta	Murdock Equeu, Chairman	Atlanta
W. W. Battey	Augusta	L. W. Williams	Savannah
Chas. E. Lawrence	Atlanta	J. R. S. Mays	Macon
W. A. Newman	Macon	Eustace A. Allen	Atlanta
C. F. Holton	Savannah	W. Bruce Schaefer	Toccoa
John P. Garner	Atlanta	Ralph H. Chaney	Augusta
J. H. Mull	Rome	W. L. Bazemore	Macon
Rufus A. Askew	Atlanta	J. Harry Rogers	Atlanta
<i>Student Loan Fund</i>		W. G. Elliott	Cuthbert
Mrs. Shelley C. Davis, Chairman	Atlanta	<i>Revision of Pharmacopeia of U. S.</i>	
G. Lombard Kelly	Augusta	Allen H. Bunce, Chairman	Atlanta
R. Hugh Wood	Emory University	C. C. Aven	Atlanta
<i>Scientific Exhibits</i>		Hal M. Davison	Atlanta
Robert B. Greenblatt, Chairman	Augusta	<i>Prepayment Medical Care Plans</i>	
J. Elliott Scarborough	Emory University	W. S. Dorrough, Chairman	Atlanta
Marion T. Benson, Jr.	Atlanta	John L. Elliott	Savannah
Lee Howard	Savannah	Steve P. Kenyon	Dawson
Robert C. Pendergrass	Americus	Kenneth D. Grace	LaGrange
Julian K. Quattlebaum	Savannah	A. M. Phillips	Macon
J. Hiram Kite	Atlanta	W. L. Pomeroy	Waycross
Max Mass	Macon	D. Lloyd Wood	Dalton
Clair A. Henderson	Savannah	C. K. Wall	Thomasville
Leila Denmark	Atlanta	H. L. Cheves	Union Point
M. Fernan-Nunez	Dublin	W. Bruce Schaefer	Toccoa
<i>Medical Preparedness</i>		<i>Committee to Revise the Constitution</i>	
W. A. Selman, Chairman	Atlanta	Allen H. Bunce, Chairman	Atlanta
Alternate, L. Minor Blackford	Atlanta	C. H. Richardson, Sr.	Macon
A. O. Linch	Atlanta	Marion C. Pruitt	Atlanta
Alternate, John W. Turner	Atlanta	W. F. Reavis	Waycross
Edgar D. Shanks	Atlanta	John A. Dunaway, Attorney for Association	Atlanta
Alternate, Spencer A. Kirkland	Atlanta	A. M. Phillips, President	Macon
<i>Postgraduate Study</i>		Edgar D. Shanks, Secretary-Treasurer	Atlanta
R. Hugh Wood, Chairman	Emory University	<i>Liaison Committee of 53 Constituent</i>	
G. Lombard Kelly	Augusta	<i>State Medical Associations to Coordinate</i>	
R. H. Oppenheimer	Atlanta	<i>Educational Program of A.M.A.</i>	
Thomas L. Ross, Jr.	Macon	Jack C. Norris	Atlanta
Hollis Hand	LaGrange	<i>Group Insurance</i>	
Richard Torpin	Augusta	John W. Turner, Chairman	Atlanta
Cleveland Thompson	Waynesboro	Kenneth S. Hunt	Griffin
C. H. Richardson, Jr.	Macon	James H. Arnold	Newnan
F. H. Simonton	Chickamauga	Roy L. Gibson	Columbus
Vernon E. Powell	Atlanta	F. H. Sams	Reynolds
John Sharpley	Savannah	Frank M. Houser	Macon
J. M. Byne, Jr.	Waynesboro	E. S. Colvin	Atlanta
<i>Liaison Committee</i>		<i>Medical Civilian Preparedness</i>	
<i>Georgia State Medical Association</i>		Edgar M. Dunstan, Chairman	Atlanta
<i>(Negro)</i>		Robert W. Candler	Atlanta
J. F. Hanson, Chairman	Macon	Charles E. Dowman	Atlanta
J. R. McCord	Atlanta	Joseph S. Skobba	Atlanta
W. E. Storey	Columbus	Walter M. Bartlett	Decatur
Lee H. Battle, Jr.	Rome	Alvin E. Siegel	Macon
E. Van Buren	Atlanta	J. H. Pinholster	Savannah
H. H. Allen	Decatur	W. K. Philbot	Augusta
<i>Awards</i>		T. J. Ferrell	Waycross
C. H. Richardson, Sr., Chairman	Macon	<i>Public Relations Committee</i>	
T. Schley Gatewood	Americus	Stephen T. Brown, Chairman	Atlanta
G. Lombard Kelly	Augusta	Christopher J. McLoughlin	Atlanta
W. W. Baxley	Macon	W. G. Elliott	Cuthbert
W. S. Dorrough	Atlanta	J. E. Penland	Waycross
Mason I. Lowance	Atlanta	W. D. Hall	Calhoun
J. Dean Paschal	Dawson	Thomas L. Ross, Jr.	Macon
<i>Cancer Commission</i>		Hartwell Joiner	Gainesville
J. Elliott Scarborough, Chairman	Emory University	Ralph H. Chaney	Augusta
Everett L. Bishop	Atlanta	Emery C. Herman	LaGrange
Robert C. Pendergrass	Americus	<i>Pediatrics</i>	
Thomas Harrold	Macon	W. W. Anderson, Chairman	Atlanta
Enoch Callaway	LaGrange	Philip A. Mulherin	Augusta
Lee Howard	Savannah	Frank Schley	Columbus
W. F. Jenkins	Columbus	Edwin R. Watson	Macon
J. T. McCall	Rome	M. M. McCord	Rome

Howard J. Morrison	Savannah
W. Charles Boswell	Macon
A. M. Johnson	Valdosta
Leila Denmark	Atlanta

Maternal Care

C. B. Upshaw, Chairman	Atlanta
Guy V. Rice, Secretary	Atlanta
T. F. Sellers	Atlanta
Richard Torpin	Augusta
E. D. Colvin	Atlanta
John R. McCain	Atlanta
Evelyn Swilling	Macon

Tuberculosis

Samuel E. Patton, Chairman	Macon
C. C. Aven	Atlanta
Rufus F. Payne	Rome
H. C. Schenck	Atlanta
Robert C. Major	Augusta

Faternal Delegates to Other States

Alabama—Enoch Callaway, LaGrange; Roy L. Gibson, Columbus; Edwin T. Arnold, Jr., Hogansville; Harry B. Baxley, Donalsonville.

Florida—Braswell E. Collins, Waycross; J. L. Campbell, Jr., Valdosta; Rudolph Bell, Thomasville; H. M. McKemie, Albany.

North Carolina—Thomas J. Hicks, McCaysville; Hartwell Joiner, Gainesville; B. J. Roberts, Cornelia.

South Carolina—D. R. Thomas, Augusta; Hubert Milford, Hartwell; Anne Hopkins, Savannah.

Tennessee—F. H. Simonton, Chickamauga; D. Lloyd Wood, Dalton; Ralph N. Johnson, Rome.

*STATE BOARD OF HEALTH**

- First District: James M. Byne, Jr., Waynesboro, Sept. 1, 1951.
 Second District: C. K. Sharp, Arlington, Sept. 1, 1951.
 Third District: R. C. Montgomery, Butler, Sept. 1, 1954.
 Fourth District: M. M. Head, Zebulon, Sept. 1, 1955.
 Fifth District: Spencer A. Kirkland, Atlanta, Sept. 1, 1954.
 Sixth District: Walter Bramblett, Jr., Forsyth, Sept. 1, 1956.
 Seventh District: Fred H. Simonton, Chickamauga, Sept. 1, 1956.
 Eighth District: C. J. Maloy, McRae, Sept. 1, 1956.
 Ninth District: Robert L. Rogers, Gainesville, Sept. 1, 1951.
 Tenth District: Thos. W. Goodwin, Augusta, Sept. 1, 1955.

*STATE OF GEORGIA AT LARGE****Georgia Dental Association*

- J. M. Hawley, Columbus, Sept. 1, 1952.
 J. G. Williams, Atlanta, Sept. 1, 1952.

Georgia Pharmaceutical Association

- Preston Sumner, East Point, Sept. 1, 1953.
 A. T. McRae, Douglas, Sept. 1, 1956.

*Nominated by their respective district medical societies and appointed for six-year terms.

**Nominated by their respective associations.

STATE BOARD OF MEDICAL EXAMINERS

Edgar H. Greene	Atlanta
J. W. Palmer	Ailey
Steve P. Kenyon	Dawson
Grady N. Coker	Canton
R. H. McDonald	Newnan
Phil E. Roberson	Albany
Fred J. Coleman	Dublin
Alexander B. Russell	Winder
Rufus A. Askew	Atlanta
W. H. Powell	Hazlehurst

The Medical Association of Georgia will hold its 1951 annual session in Augusta. The dates are April 17, 18, 19 and 20. Bon Air Hotel will be headquarters, with Partridge Inn participating. Please make your reservations now.

THE M.D. GOES PR
 Continued from Page 502)

years to come.

I know of no better way of concluding this talk than that of quoting from Dr. Walter C. Payne of Pensacola, who served as president of the Florida State Medical Association last year. His entire address to the the Florida House of Delegates was devoted to medical public relations, something which would have been unheard of 10 or 20 years ago. In urging improvement of medical public relations, Dr. Payne said:

"The time has arrived for us to analyze the situation without bias. We must find out why a part of the public has become dissatisfied, and then do whatever is necessary to remove the cause or causes of this dissatisfaction. The public can be divided into two groups: the distributors of medical care and the consumers of medical care. We as distributors must never overlook the fact that the consumers are as vitally interested in health problems as we are."

I note that the make-up of the open-forum panel which is to follow later tonight indicates that this is the philosophy also of the Medical Association of Georgia.

The public has every right to ask questions and it is up to us of the medical profession to supply the answers if we can. I am reminded in this regard of the story of a man who went to buy a parrot. The seller said, "It speaks eight languages." The buyer said, "Send it out to the house." That night the man got home, and said to his wife, "Did the bird come?" "Yes, it's in the oven," replied the wife. "My gracious," said the husband, "that parrot spoke eight languages." The wife's answer was, "Well, why didn't it speak up!"

It is a genuine hope that all of you who have any questions this evening will speak up during the forum session. I thank you.

HEALTHGRAMS

Modern public health does not prevent death alone. It also prevents disease. For every life preserved by a tuberculosis program, scores of individuals are saved from invalidism. For every life saved from malaria, hundreds of individuals are maintained as active producers in the population. Am. J. Pub. Health, August, 1950.

* * *

Even after clinical follow-up in minimal tuberculosis has confirmed the interpretation of the ill-defined x-ray shadow, the physician is faced with another and perhaps more serious problem. He must then cope with the question of the lesion's significance, and must decide upon the course of action to be taken in its management. Will the patient need to undergo hospitalization and surgical procedure? Can the lesion be managed under a home-care regimen? Or will it be sufficient to place the patient under long term observation, imposing only token limitations upon normal activity? It will be most urgent that these questions be resolved properly and decisively.

These are but a few of the problems which our screening survey experiences in communities and hospitals pose for us and for the medical profession generally. Meeting them directly and fully is the best assurance of effective tuberculosis control. Robert J. Anderson, M.D., Journal-Lancet, April, 1950.

MEDICAL ASSOCIATION OF GEORGIA

*County Medical Societies 1950***APPLING COUNTY****Officers**

President..... Brown, J. B., Jr.
 Vice-President..... Branch, W. D.
 Secretary-Treasurer..... Holt, J. T.

Members

Bedingfield, James A., Baxley
 Branch, W. D., Baxley
 Brown, J. D., Jr., Baxley
 Holt, J. T., Baxley
 Kennedy, F. D., Baxley
 McCracken, H. C., Baxley

BALDWIN COUNTY**Officers**

President..... Gibson, Wallace M.
 Vice-President..... Leaphart, E. C.
 Sec.-Treas..... Pursley, Norman B.
 Delegate..... Waller, Robert D.
 Alternate Delegate..... Walker, E. Y.
 Censors: Yarbrough, Y. H.; Brad-
 ford, R. W., and Wiley, John D.

Members

Allen, E. W., Milledgeville
 Allen, H. D., Jr., Milledgeville
 Bailey, L. A., Milledgeville
 Bradford, R. W., Milledgeville
 Chestnut, T. H., Milledgeville
 Clodfelter, Thos. C., Milledgeville
 Crichton, Robert B., Milledgeville
 Fulghum, C. B., Milledgeville
 Fussell, J. K., Milledgeville
 Gibson, Wallace M., Milledgeville
 Hall, Thomas M., II, Fairfield State
 Hospital, Newtown, Conn.
 Leaphart, E. C., Milledgeville
 Peacock, Thos. G., Milledgeville
 Pennington, L. E., Terrell State
 Hospital, Terrell, Texas
 Pennington, Veronica Murphy, Ter-
 rell State Hospital, Terrell, Texas
 Pursley, Norman B., Milledgeville
 Sikes, Walter A., University Hos-
 pital, Augusta
 Sikes, Z. S., VA Hospital, Roanoke
 17, Va.
 Smith, M. E., Milledgeville
 Walker, E. Y., Milledgeville
 Waller, Robert D., Milledgeville
 Wiley, John D., Milledgeville
 Williams, David C., Milledgeville
 Woods, O. C., Milledgeville
 Yarbrough, Y. H., Milledgeville

BANKS COUNTY**Member**

Jolley, J. S., Homer

BARTOW COUNTY**Officers**

President.....Quillian, Wm. B., Jr.
 Vice-President.....Bradford, H. B.
 Secretary-Treasurer.....Horton, A. L.
 Censors: Howell, S. M.; Quillian,
 Wm. B., Jr., and Bradford, H. B.

Members

Bradford, H. B., Cartersville
 Ellis, Charles L., Kingdon

Horton, A. L., Cartersville
 Howell, S. M., Cartersville
 Howell, W. Harvey, Cartersville
 McGowan, Hugh S., Cartersville
 Quillian, Wm. B., Jr., Cartersville
 Stanford, J. W., Cartersville
 Wofford, W. E., Cartersville

BEN HILL COUNTY**Officers**

President.....Ward, Francis
 Vice-President.....Cornwell, G. K.
 Secretary-Treasurer.....Coffee, W. P.
 Delegate.....Johnson, Roy, Jr.
 Alternate Delegate.....Ware, D. B.
 Censors: Willis, G. W.; Willcox,
 W. D., and Smith, J. E.

Members

Bradley, T. E., Fitzgerald
 Coffee, W. P., Fitzgerald
 Cornwell, G. K., Fitzgerald
 Dismuke, H. L., Ocilla
 Harper, A., Wray (Hon.)
 Johnson, Roy, Jr., Fitzgerald
 McElroy, S. L., Ocilla
 McMillan, J. E., Fitzgerald
 Smith, J. E., Fitzgerald
 Ward, Francis, Fitzgerald
 Ware, D. B., Fitzgerald
 Willcox, W. D., Fitzgerald
 Willis, G. W., Ocilla

BIBB COUNTY**Officers**

President.....Richardson, C. H., Jr.
 President-Elect.....Edenfield, Robt. W.
 Vice-President.....Hall, John I.
 Secretary-Treasurer.....Tift, Henry H.
 Delegate.....Applewhite, J. D.
 Delegate.....Kay, J. B.
 Alternate Delegate.....Wasden, C. N.
 Censor.....Baxley, W. W.

Members

Aldrich, Fred N., Professional Bldg.,
 Macon
 Anderson, Carl L., 556 Mulberry
 St., Macon
 Anderson, J. C., Persons Bldg.,
 Macon
 Applewhite, J. D., 700 Spring St.,
 Macon
 Atkinson, H. C., 700 Spring St.,
 Macon
 Barton, Wm. L., Persons Bldg.,
 Macon
 Bashinski, Ben, 700 Spring St.,
 Macon (deceased)
 Baxley, W. W., Persons Bldg.,
 Macon
 Bazemore, W. L., 553 Walnut St.,
 Macon
 Benton, Charles C., Professional
 Bldg., Macon
 Billingshurst, George A., Persons
 Bldg., Macon
 Blum, Leon J., Warner Robins
 Boswell, W. Chas., Persons Bldg.,
 Macon
 Brannen, Edmund A., 700 Spring
 St., Macon
 Brown, Roland A., Medical Arts
 Bldg., Macon

Bush, W. Holloway, 959 Daisy Park,
 Macon
 Cary, R. Frank, 815 Hemlock St.,
 Macon
 Chrisman, W. W., 700 Spring St.,
 Macon
 Clay, J. Emory, Clinic Hospital,
 Macon
 Cole, Allan A., 810 Mulberry St.,
 Macon
 Corn, Ernest, 700 Spring St., Macon
 Dove, W. B., 775 Boulevard, Macon
 (Hon.)
 DuPree, Geo. W., Gordon
 DuPree, John T., Macon Hospital,
 Macon
 Edenfield, Robert W., 700 Spring
 St., Macon
 Farmer, C. Hall, 553 Walnut St.,
 Macon
 Ferrell, R. G., Jr., Professional Bldg.,
 Macon
 Forester, B. W., 700 Spring St.,
 Macon
 Gallemore, John L., Perry
 Goldstein, J. Jay, Warner Robins
 Golsan, W. R., Persons Bldg., Macon
 Goodman, Leon J., Bibb Bldg.,
 Macon
 Goolsby, R. C., Jr., 700 Spring St.,
 Macon
 Hall, John I., Bankers Insurance
 Bldg., Macon
 Hall, T. H., Grand Bldg., Macon
 Hanson, J. F., 3834 The Prado,
 Macon
 Harrold, Thomas, 700 Spring St.,
 Macon
 Hatcher, Milford B., 700 Spring
 St., Macon
 Hazlehurst, W. Derrell, 765 Spring
 St., Macon
 Houser, Frank M., Grnad Bldg.,
 Macon
 Hurley, Thos. A., Clinic Hospital,
 Macon (Hon.)
 James, L. P., 700 Spring St., Macon
 Jarratt, W. D., Jr., 553 Walnut St.,
 Macon
 Johnson, Geo. L., VA Regional
 Office, Montgomery, Ala.
 Jones, John P., 253 Hemlock St.,
 Macon
 Jones, Rudolph W., Jr., 959 Daisy
 Park, Macon
 Jordan, Wm. K., 700 Spring St.,
 Macon
 Kay, J. B., Byron
 Keen, O. F., Persons Bldg., Macon
 King, J. L., Persons Bldg., Macon
 Lewis, Wm. E., Persons Bldg.,
 Macon
 Mass, Max, Macon Hospital, Macon
 Massenburg, G. Y., Clinic Hospital,
 Macon
 Mays, J. R. S., 700 Spring St.,
 Macon
 McAllister, Robert W., 700 Spring
 St., Macon

McFarlane, John W., Professional Bldg., Macon
 McLaughlin, C. K., Bankers Insurance Bldg., Macon
 McMichael, V. H., Clinic Hospital, Macon
 McMillan, E. C., Bibb Bldg., Macon
 Meriwether, W. W., Persons Bldg., Macon
 Meserve, F. B., 721 McArthur Blvd., Warner Robins
 Mobley, W. E., 563 College St., Macon (Hon.)
 Nathan, Daniel E., Fort Valley
 Neal, Jule C., Jr., Professional Bldg., Macon
 Neuberg, S. Charlotte, Person Bldg., Macon
 Newman, W. A., 700 Spring St., Macon
 Newton, R. G., Persons Bldg., Macon
 Olnick, Herbert M., 700 Spring St., Macon
 Patton, Samuel E., Persons Bldg., Macon
 Phillips, A. M., Bankers Insurance Bldg., Macon
 Pope, Edgar M., 700 Spring St., Macon
 Porch, Leon D., 700 Spring St., Macon
 Rawls, Lewis L., Persons Bldg., Macon
 Reifler, R. M., First National Bank Bldg., Macon
 Richardson, C. H., 700 Spring St., Macon
 Richardson, C. H., Jr., 700 Spring St., Macon
 Richardson, R. W., Persons Bldg., Macon
 Ridley, C. L., Macon Hospital, Macon
 Ridley, C. L., Jr., Persons Bldg., Macon
 Rogers, T. E., 120 Clisby Place, Macon (Hon.)
 Rogers, T. E., Jr., 700 Spring St., Macon
 Ross, Thomas L., Jr., 700 Spring St., Macon
 Rubin, Samuel N., Gordon
 Rumble, Charles T., 700 Spring St., Macon
 Rutland, S. C., Ga. Dept. of Public Health, Atlanta
 Siegel, Alvin E., 553 Walnut St., Macon
 Smith, Horace D., 10519 Ohio Ave., Los Angeles 25, Calif.
 Smith, J. Allen, 700 Spring St., Macon
 Stamps, Edward R., Bibb Bldg., Macon
 Stewart, J. Benham, 700 Spring St., Macon
 Suarez, Raymond, 553 Walnut St., Macon
 Swilling, Evelyn, 553 Medical Arts Bldg., Macon
 Thompson, O. R., 700 Spring St., Macon
 Tift, Henry H., 765 Spring St., Macon
 Vinson, Frank, Fort Valley
 Walker, D. D., 700 Spring St., Macon

Ware, Ford, Bankers Insurance Bldg., Macon
 Wasden, C. N., Bankers Insurance Bldg., Macon
 Watson, Edwin R., 553 Walnut St., Macon
 Weaver, H. G., 700 Spring St., Macon
 Williams, W. A., 700 Spring St., Macon
 Woodhall, J. P., Professional Bldg., Macon
 Work, Samuel D., Jr., 853 Hemlock St., Macon
 Zackary, J. D., Gray

BLUE RIDGE SOCIETY (Fannin-Gilmer-Union Counties)

Officers

President.....Brooks, Courtney C.
 Vice-President.....O'Daniel, James F.
 Secretary-Treasurer.....Hicks, Thos. J.
 Delegate.....Hicks, Thos. J.
 Alternate Delegate.....O'Daniel, Jas. F.
 Censors: Watkins, Ed W.; O'Daniel, James F., and Hicks, Thos. J.

Members

Brooks, Courtney C., Blue Ridge
 Burdine, James M., Blue Ridge
 Hicks, Thos. J., McCaysville
 O'Daniel, James F., Ellijay
 O'Daniel, John Y., Ellijay
 Pettit, James K., Manheim Garden Apts., 13-B, Philadelphia 44, Pa.
 Shanks, Edgar D., Jr., University Hospital, Augusta (Asso.)
 Tanner, Wm. F., Young Harris
 Watkins, Ed W., Ellijay

BROOKS COUNTY

Officers

President.....Wasden, Harry A.
 Vice-President.....Jones, A. B., Jr.
 Sec.-Treas.....Thwaite, Walter G.
 Delegate.....Smith, L. A.
 Alt. Delegate.....Thwaite, Walter G.

Members

Jelks, E. L., Quitman (Hon.) (deceased)
 Jones, A. B., Jr., Quitman
 Smith, L. A., Quitman
 Thwaite, Walter G., Quitman
 Wasden, Harry A., Quitman

BULLOCH-CANDLER-EVANS COUNTIES

Officers

President.....Floyd, Waldo E.
 Vice-President.....Hames, Curtis G.
 Secretary-Treas.....Griffin, Louie H.
 Delegate.....Griffin, Louie H.
 Alt. Delegate.....Mooney, John, Jr.
 Censors: Deal, Ben A.; Simmons, W. E., Jr., and Whiteside, J. H.

Members

Daniel, A. B., Statesboro
 Daniel, J. W., Claxton
 Deal, Albert M., Statesboro
 Deal, B. A., Statesboro
 Deal, Daniel L., Statesboro
 Deal, Helen Read, Statesboro
 Fletcher, I. Elizabeth, 160 Pryor St., S. W., Atlanta
 Floyd, W. E., Statesboro
 Griffin, Louie H., Claxton

Hagins, Wm. A., R.F.D., Oliver
 Hames, Curtis G., Claxton
 Kennedy, R. L., Metter
 Lunceford, Kathryn Simmons, Metter
 McElveen, J. M., Brooklet
 Mooney, John, Jr., Statesboro
 Moore, Ed L., Statesboro
 Nevil, J. L., Metter
 Neville, J. C., Register (Hon.)
 Olliff, H. H., Register
 Patrick, J. Z., Pulaski (Hon.)
 Simmons, W. E., Metter
 Stapleton, C. E., Statesboro
 Stewart, Jas. A., Portal
 Watkins, E. C., Brooklet

BURKE COUNTY

Officers

President.....Lowe, W. R.
 Vice-President.....Hillis, W. W.
 Sec.-Treas.....Butterfield, D. L.
 Delegate.....Byne, J. M., Jr.
 Alt. Delegate.....Butterfield, D. L.

Members

Barger, E. A., Waynesboro
 Bent, H. F., Midville
 Butterfield, D. L., Waynesboro
 Byne, J. M., Jr., Waynesboro
 Green, Charles G., Waynesboro
 Hillis, W. W., Sardis
 Lowe, W. R., Midville (deceased)
 McCarver, W. C., Vidette

CARROLL-DOUGLAS- HARALSON COUNTIES

Officers

President.....Worthy, W. Steve
 Vice-President.....Roberts, O. W.
 Secretary-Treasurer.....Patrick, E. V.
 Delegate.....Denney, Roy L.
 Alternate Delegate.....Reese, D. S.
 Censors: Pritchett, J. H., Jr.; Powell, J. Ernest, Jr., and Reeve, Thomas E., Jr.

Members

Aderhold, W. A., Carrollton
 Allen, C. H., Bremen
 Bagley, D. A., Austell
 Barker, H. L., Carrollton
 Bass, E. C., Carrollton
 Berry, Robert L., Villa Rica
 Brock, W. B., 500 Majoree Ave., Coral Gables, Fla. (Hon.)
 Denney, Roy L., Carrollton
 Downey, Wm. P., Tallapoosa
 Eaves, B. F., Draketown (Hon.)
 Hamilton, R. E., Douglasville
 Hogue, W. L., Villa Rica
 Holtz, Louis, Carrollton
 Hutcheson, E. B., Buchanan (Hon.) (deceased)
 King, O. D., Bremen
 Morgan, F. W., Douglasville
 Nutt, J. J., Route 1, Bowdon
 Patrick, E. V., Carrollton
 Powell, B. C., Villa Rica
 Powell, John E., Villa Rica
 Powell, J. Ernest, Jr., Villa Rica
 Pritchett, J. H., Jr., Bremen
 Reese, D. S., Carrollton
 Reeve, Thomas E., Jr., Carrollton
 Roberts, O. W., Carrollton
 Scales, S. F., Carrollton (deceased)
 Smith, W. P., Bowdon
 Spruell, T. M., Temple (Hon.)
 Taylor, Thomas B., Douglasville
 Thomasson, W. E., Carrollton

Vansant, C. A., Douglasville
 Watts, J. W., Bowdon
 Wilson, L. E., Bowdon
 Word, J. J., Tallapoosa
 Worthy, W. Steve, Carrollton

GEORGIA MEDICAL SOCIETY (Chatham County)

Officers

President.....Kandel, H. M.
 President-Elect.....Dunn, L. B.
 Vice-President.....Freedman, L. M.
 Sec.-Treas.....Youngblood, Sam, Jr.
 Delegate.....Elliott, John L.
 Delegate.....Bowden, Ralph O.
 Delegate.....King, Ruskin
 Alternate Delegate...Lott, Oscar H.
 Alternate Delegate...Smith, Harold M.
 Alternate Delegate...Pacifiçi, Joseph

Members

Barfield, Wm. E., 722 Drayton St., Savannah
 Bedingfield, W. O., 14 W. Bull St., Savannah
 Bowden, Ralph O., 24 W. Gaston St., Savannah
 Broderick, J. R., 125 E. Jones St., Savannah
 Brown, C. T., Guyton
 Brown, F. B., 22 W. Gaston St., Savannah
 Brown, Walter E., 14 W. Hull St., Savannah
 Center, Abraham H., 17-A W. Gordon St., Savannah
 Charlton, T. J., 220 E. Oglethorpe Ave., Savannah
 Chisholm, J. F., 512 Abercorn St., Savannah
 Cluxton, Harley E., Jr., Armour Laboratories, Chicago, Ill.
 Cluxton, H. Hayes, New Britain Gen. Hospital, New Britain, Conn.
 Cole, W. A., 32 E. Taylor St., Savannah
 Compton, H. T., 17 E. Jones St., Savannah
 Cook, Ellison R., III, 513 Whitaker St., Savannah
 Coward, Allen W., 17 E. Jones St., Savannah
 Craig, James B., 19½ W. Gordon St., Savannah
 Crawford, W. B., 14 E. Taylor St., Savannah
 Crawford, W. Barron, Jr., 14 E. Taylor St., Savannah
 Dancy, William R., 102 W. Jones St., Savannah
 Daniel, J. W., 26 E. 31st St., Savannah (Hon.)
 Daniel, John W., Jr., 5 E. Jones St., Savannah
 deCaradeuc, St. J. R., DeRenne Apts., Savannah
 Demmond, E. C., DeRenne Apts., Savannah
 Drane, Robert, DeRenne Apts., Savannah
 Duncan, J. Harry, 116 E. Jones St., Savannah
 Dunn, L. B., 220 E. Huntingdon St., Savannah

Egan, M. J., 210 E. Liberty St., Savannah
 Elliott, John L., 212 E. Huntingdon St., Savannah
 Epting, M. J., 722 Drayton St., Savannah
 Faggart, G. H., 18 W. Oglethorpe Ave., Savannah
 Filligim, D. B., 118 E. Jones St., Savannah
 Fleming, Paul N., 14 W. Taylor St., Savannah
 Frech, Henry C., Jr., 423 Bull St., Savannah
 Freedman, L. M., 1½ E. Gordon St., Savannah
 Fulmer, Wm. H., 19 E. 34th St., Savannah
 Gleaton, E. N., 2 E. Jones St., Savannah
 Goldenstar, Grant W., 106 E. Jones St., Savannah
 Gottschalk, Robert B., 123 E. Jones St., Savannah
 Graham, R. E., 212 E. Gaston St., Savannah
 Ham, O. Emerson, 414 Bull St., Savannah
 Holloman, A. L., 119 E. Jones St., Savannah
 Holton, C. F., DeRenne Apts., Savannah
 Hopkins, Anne, 22 E. Jones St., Savannah
 Howard, Lee, DeRenne Apts., Savannah
 Howard, Lee, Jr., DeRenne Apts., Savannah
 Iseman, Everette, 103 E. Jones St., Savannah (deceased)
 Johnson, G. H., 126 E. Oglethorpe Ave., Savannah
 Jones, Jabez, 11 W. Gordon St., Savannah
 Kandel, H. M., 432 Abercorn St., Savannah
 Kantor, W. W., 345 Bull St., Savannah
 King, Ru-kin, 10 W. Taylor St., Savannah
 Lang, G. H., 202 E. Liberty St., Savannah
 Lange, Stephen J., 12 E. Taylor St., Savannah
 Lee, Lawrence, DeRenne Apts., Savannah
 Lee, Lawrence, Jr., DeRenne Apts., Savannah
 Levington, H. L., 209 E. Gaston St., Savannah
 Long, W. V., Hotel DeSoto, Savannah
 Lott, Oscar H., 111 E. Jones St., Savannah
 Lynn, S. C., 124 E. Jones St., Savannah
 Maner, E. N., 191 E. 45th St., Savannah (Hon.)
 Martin, R. V., 18 E. 31st St., Savannah (Hon.)
 Massoud, M. A., Pineora (Hon.)
 Mazo, Milton M., 8 E. Taylor St., Savannah
 McGee, H. H., 7 W. Gordon St., Savannah

McGoldrick, Thos. A., Jr., 15 E. Gordon St., Savannah
 McLean, Jay, 612 Drayton St., Savannah
 Metts, J. C., 427 Bull St., Savannah
 Morrison, Howard J., 444 Drayton St., Savannah
 Neville, R. L., 11 W. Gordon St., Savannah
 Nichols, Fenwick R., Jr., 123 E. 51st St., Savannah
 Norton, W. A., 105 E. Oglethorpe Ave., Savannah
 Oliver, R. L., DeRenne Apts., Savannah
 Olmstead, G. T., 20 E. Taylor St., Savannah
 Osborne, E. S., 19 E. Jones St., Savannah
 Osborne, Wm. W., St. Joseph's Hospital, Savannah
 Osteen, W. L., 610 Anderson Ave., Savannah
 Pacifiçi, Joseph, 2 E. Taylor St., Savannah
 Peterson, T. A., 11 W. Jones St., Savannah
 Pinholster, J. H., 241 Abercorn St., Savannah
 Porter, J. E., 128 E. Taylor St., Savannah
 Portman, Henry J., Jr., 9 E. Gordon St., Savannah
 Powers, L. K., 29 E. Jones St., Savannah
 Prince, Charles L., 2515 Habersham St., Savannah
 Quattlebaum, J. K., 24 W. Gaston St., Savannah
 Rabhan, L. J., 314 E. Gaston St., Savannah
 Redmond, C. G., 701 Whitaker St., Savannah
 Redmond, C. R. A., 530 E. 49th St., Savannah
 Righton, H. Y., 101 E. Waldburg St., Savannah
 Robinson, David, 104 E. Taylor St., Savannah
 Rollings, Harry E., 513 Whitaker St., Savannah
 Rosen, E. F., 5 E. Gordon St., Savannah
 Rosen, Samuel F., 4 E. Jones St., Savannah
 Rubin, Jacob, 350 Bull St., Savannah
 Sax, Charles E., 19 W. Liberty St., Savannah
 Scardino, Peter L., 2515 Habersham St., Savannah
 Schley, R. L., Jr., 114 W. Gaston St., Savannah
 Schneider, M. M., 12½ W. Taylor St., Savannah
 Sharpley, Helen, 109 E. Jones St., Savannah
 Sharpley, H. F., Jr., DeRenne Apts., Savannah
 Sharpley, John G., DeRenne Apartments, Savannah
 Shearouse, J. Wm., 14 E. Taylor St., Savannah
 Smith, H. M., 9 W. Gordon St., Savannah

Smith, P. H., 3 E. Gordon St., Savannah
 Stalvey, John K., Jr., 110 E. Taylor St., Savannah
 Straight, G. W., 202 Gordon St., Savannah
 Train, J. K., 1107 Bull St., Savannah
 Train, J. K., Jr., 1107 Bull St., Savannah
 Upson, E. T., 201 E. Hall St., Savannah
 Usher, Charles, 6 E. Liberty St., Savannah
 Victor, Jules, Jr., 126 E. Taylor St., Savannah
 Waring, A. J., DeRenne Apts., Savannah
 Waring, Ruth Moyer, 905 E. Duffy St., Savannah
 Waring, Thomas P., 905 E. Duffy St., Savannah
 Westerfield, C. W., 101 Garrard Ave., Gordonston, Savannah
 Whelan, E. J., 14 W. Jones St., Savannah
 Williams, A. F., 127 E. Gordon St., Savannah
 Williams, L. W., 105 E. Jones St., Savannah
 Wilson, W. D., 104 W. Waldberg St., Savannah
 Withington, John C., 106 W. Jones St., Savannah
 Youngblood, Sam, Jr., 108 E. Taylor St., Savannah
 Zirkle, John G., 722 Drayton St., Savannah

CHATTOOGA COUNTY

Officers

President Allen, John J.
 Vice-President Gist, Wm. T.
 Sec.-Treas. Goodwin, Hugh A.
 Delegate Little, G. H.

Members

Allen, John J., Trion
 Brown, H. D., Summerville
 Gist, Wm. T., Summerville
 Goodwin, Hugh A., Summerville
 Hair, W. B., Summerville (Hon.)
 Hyden, Wm. U., Trion
 Lawrence, Dan S., Menlo
 Little, G. H., Trion
 Little, R. N., Summerville

CHEROKEE-PICKENS COUNTIES

Officers

President Roper, E. A.
 Vice-Pres. Andrews, Chas. R., Jr.
 Sec.-Treas. Hendrix, A. M.
 Delegate Roper, C. J.
 Censors: Coker, Grady N.; Vansant, T. J., and Looper, Ben K.

Members

Andrews, Charles R., Jr., Canton
 Brooke, George C., Canton
 Coker, Grady N., Canton
 Hendrix, A. M., Canton
 Hendrix, M. G., Ball Ground (Hon.)
 Jones, Robert T., III, Canton
 Looper, Ben K., Canton
 Moore, R. M., Waleska (Hon.)
 Roper, C. J., Jasper
 Roper, E. A., Jasper
 Vansant, T. J., Woodstock

CLARKE-MADISON-OCONEE COUNTIES

Officers

President Neighbors, J. B., Jr.
 Vice-President Gerdine, Linton
 Sec.-Treas. Bonner, William H.
 Delegate Hubert, M. A.

Members

Barner, John L., Athens General Hospital, Athens
 Bond, D. T., Danielsville
 Bonner, William H., 130 W. Hancock Ave., Athens
 Brown, W. W., City Health Dept., Athens
 Bryant, C. H., Comer
 Burroughs, Wm. F., Danielsville
 Byrd, H. G., 1010 Prince Ave., Athens
 Cabaniss, W. H., Sou. Mutual Bldg., Athens
 Dover, Tom A., 1010 Prince Ave., Athens
 Erwin, Goodloe Y., 1010 Prince Ave., Athens
 Florence, Loree, Sou. Mutual Bldg., Athens
 Gallis, Anthony H., Georgian Hotel, Athens
 Gerdine, Linton, Sou. Mutual Bldg., Athens
 Goldsmith, L. H., Sou. Mutual Bldg., Athens
 Green, James A., 1010 Prince Ave., Athens
 Gustin, Ronald M., St. Mary's Hospital, Athens
 Harris, H. B., 1010 Prince Ave., Athens
 Harrison, W. B., Regional Health Office, Athens
 Holliday, Henry C., Sou. Mutual Bldg., Athens
 Hubert, M. A., 1010 Prince Ave., Athens
 Hunnicutt, J. A., Sou. Mutual Bldg., Athens
 Keller, A. Paul, Jr., 1010 Prince Ave., Athens
 Kitchens, Wm. C., 130 W. Hancock Ave., Athens
 Maxwell, Edgar J., Jr., Gilbert Memorial Hospital, Athens
 McPherson, J. H. T., Jr., 1010 Prince Ave., Athens
 Meissner, Tom, 1010 Prince Ave., Athens
 Middlebrooks, C. O., Holman Hotel, Athens (Hon.)
 Moss, W. L., Jefferson Road, Athens (Hon.)
 Mullins, D. F., Jr., St. Mary's Hospital, Athens
 Neighbors, J. B., Jr., 1010 Prince Ave., Athens
 Patton, Lewis S., Sou. Mutual Bldg., Athens
 Randolph, R. H., 130 W. Hancock Ave., Athens
 Simpson, John A., 1010 Prince Ave., Athens
 Stegeman, J. F., 1010 Prince Ave., Athens
 Talmadge, Harry E., Sou. Mutual Bldg., Athens
 Talmadge, Sam M., 1010 Prince Ave., Athens

Traylor, J. Bothwell, 455 N. Milledge Ave., Athens
 Veale, E. O., Arnoldsville
 Wheelchel, Guy O., Sou. Mutual Bldg., Athens
 Whitley, L. L., 234 College Ave., Athens

CLAYTON-FAYETTE COUNTIES

Officers

President Robak, J. L.
 Vice-President Wallis, J. R.
 Secretary-Treasurer Busey, T. J.
 Delegate Coleman, Y. R.

Members

Busey, T. J., Fayetteville
 Campbell, Richard P., Fayetteville
 Coleman, Y. R., Jonesboro
 Robak, J. L., Jonesboro
 Wallis, J. R., Lovejoy

COBB COUNTY

Officers

President Benson, Wm. H., Jr.
 Vice-President Musarra, Elmer A.
 Sec.-Treas. Garland, C. M., Jr.
 Delegate Colquitt, Alfred, Jr.
 Alternate Delegate Hagood, M. M.
 Censors: Hagood, George F.; Fowler, A. H., and Garrett, Luke G., Jr.

Members

Bannister, C. D., Route 1, Marietta
 Benson, Earl B., Marietta
 Benson, Wm. H., Jr., Marietta
 Burleigh, Bruce D., Marietta
 Busch, John F., Marietta
 Bussey, J. G., Austell
 Butner, J. H., Powder Springs
 Cauble, George, Acworth
 Clark, F. B., Austell
 Colquitt, Alfred, Jr., Marietta
 Colquitt, Hugh S., Smyrna
 Crawley, Walter G., Marietta
 Ellis, J. W., Kennesaw (deceased)
 Fowler, A. H., Marietta
 Fowler, R. W., Marietta
 Garland, C. M., Jr., Smyrna
 Garrett, Luke G., Jr., Austell
 Gober, W. Mayes, Marietta
 Hagood, George F., Marietta
 Hagood, M. M., Marietta
 Lester, J. E., Marietta
 Levy, M. S., Smyrna
 Lindley, F. P., Powder Springs
 McCall, M. N., Jr., Acworth
 Mitchell, W. C., Smyrna
 Musarra, E. A., Marietta
 Perkinson, W. H., Marietta
 Teem, Martin Van B., Marietta

COFFEE COUNTY

Officers

President Joiner, H. G.
 Vice-President Goodwin, H. J.
 Secretary-Treasurer Harper, Sage
 Delegate Shellhouse, L. H.
 Censor Ricketson, G. M.

Members

Clark, T. H., Douglas (Hon.)
 Goodwin, H. J., Douglas
 Harper, Sage, Douglas
 Jardine, Dan A., Douglas
 Johnson, R. L., Douglas
 Joiner, H. G., Douglas
 Meeks, Calvin S., Jr., Douglas
 Oliver, James A., Douglas

Quillian, B. O., Douglas
 Ricketson, G. M., Douglas
 Shellhouse, L. H., Willacoochee
 Wallace, J. W., Douglas

COLQUITT COUNTY

Officers

President.....Stegall, R. E.
 Vice-President.....McCoy, John F.
 Sec.-Treas.....Fokes, Robert E., Jr.
 Delegate.....McCoy, John F.
 Alternate Delegate.....Stegall, R. E.
 Censors: Funderburk, A. G.; Joiner,
 R. M., and Holmes, Edgar C.

Members

Baggs, Wade H., Jr., Moultrie
 Brannen, Cecil N., Moultrie
 Conger, P. D., Moultrie
 Fike, Rupert H., Moultrie
 Fokes, Robert E., Jr., Moultrie
 Funderburk, A. G., Moultrie
 Gay, Frank M., Moultrie
 Holmes, Edgar C., Moultrie
 Joiner, R. M., Moultrie
 Lanier, J. E., Moultrie (Hon.)
 Lawson, E. L., Moultrie
 Loranger, James C., Doerun
 McCoy, John F., Moultrie
 McGinty, W. R., Moultrie
 McLeod, John W., Moultrie
 Paulk, J. R., Moultrie
 Slocumb, C. B., Doerun (Hon.)
 (deceased)
 Stegall, R. E., Moultrie
 Stone, J. C., Doerun (Hon.)
 Whittendale, Wm. H., Norman
 Park (Hon.)
 Withers, Samuel M., Moultrie
 Woodall, J. B., Moultrie

COLUMBIA COUNTY

Member

Saggus, John G., Harlem

COWETA COUNTY

Officers

President.....Parks, Joseph W., Jr.
 Vice-President.....St. John, J. O.
 Secretary-Treasurer.....Glover, N. B.
 Delegate.....Meaders, H. D.
 Alt. Delegate.....Hammond, G. W.

Members

Arnold, J. H., Newnan
 Barksdale, C. R., Grantville
 Cochran, M. F., Newnan
 Elliott, C. C., Sargent
 Farmer, C. W., Jr., Newnan
 Glover, H. C., Jr., Newnan
 Glover, N. B., Newnan
 Hammond, G. W., Newnan
 Jackson, Bruce, Route 1, Newnan
 Kinnard, George P., Newnan
 McDonald, R. H., Newnan
 Meaders, H. D., Newnan
 Parks, Joseph W., Jr., Newnan
 Peniston, J. B., Newnan
 St. John, J. O., Newnan
 Tanner, W. H., Route 2, Newnan
 Tribble, J. M., Senoia
 Woodroof, Wm. L., Newnan

CRISP COUNTY

Officers

President.....McArthur, C. E.

Secretary-Treasurer Gower, O. T., Jr.
 Delegate.....Williams, P. L.
 Alt. Delegate.....McArthur, C. E.

Members

Adams, Charles, Cordele
 Dorminy, J. N., Cordele (Hon.)
 Flournoy, H. C., Warwick
 Goss, C. C., Ashburn
 Gower, O. T., Jr., Cordele
 McArthur, C. E., Cordele
 Wheelchel, A. J., Cordele
 Williams, H. J., Cordele
 Williams, L. E., Cordele
 Williams, P. L., Cordele
 Wootten, L. O., Cordele

DECATUR-SEMINOLE COUNTIES

Officers

President.....Bridges, Henry A.
 Vice-President.....Welch, Carl B.
 Secretary-Treasurer.....Ehrlich, M. A.
 Delegate.....Baxley, Harry B.
 Alternate Delegate.....Tucker, John P.

Members

Baxley, Harry B., Donalsonville
 Bellville, Charles G., Bainbridge
 Bridges, E. C., R.F.D., Attapulgus
 Bridges, Henry A., Bainbridge
 Chason, Gordon, Bainbridge
 Ehrlich, M. A., Bainbridge
 Fort, M. A., Bainbridge
 Jenkins, H. B., Donalsonville
 Moseley, E. E., Donalsonville
 Spooner, John L., Donalsonville
 (Hon.)
 Tucker, John P., Bainbridge
 Welch, Carl B., Attapulgus
 Wheat, R. F., Bainbridge
 Wilkinson, W. L., Bainbridge
 Willis, L. W., Bainbridge

DeKALB COUNTY

Officers

President.....Smoot, Richard H.
 Vice-President.....Ansley, Robert B.
 Secretary-Treasurer.....Morse, Chester W.
 Delegate.....Evans, J. Rufus
 Alt. Delegate.....Sanders, Floyd R.

Members

Allen, H. Homer, 520 Church St.,
 Decatur
 Ansley, Robert B., 121 Clairmont
 Ave., Decatur
 Beck, John E., 356 W. Ponce de
 Leon Ave., Decatur
 Blincoc, Homer, 1 E. 105th St.,
 New York 29, N. Y.
 Bloomer, Wm. E., 520 Church St.,
 Decatur
 Cunningham, C. E., Masonic Tem-
 ple Bldg., Decatur
 Duncan, G. A., Masonic Temple
 Bldg., Decatur
 Evans, J. Rufus, Stone Mountain
 Joel, Charles, Jr., 2117 N. Decatur
 Road, N. E., Atlanta
 Kerr, Wm. K., Chamblee
 Lee, Howard B., Masonic Temple
 Bldg., Decatur
 Leslie, John T., 121 Claimont Ave.,
 Decatur
 Litton, James H., Tucker
 Matthews, Lawrence P., 1282 S.
 Oxford Road, N. E., Atlanta

Matthews, Wm. A., 3894 Peachtree
 Road, N. E., Atlanta
 McCurdy, Willis T., Stone Moun-
 tain

McGeachy, Thomas E., 520 Church
 St., Decatur

Mendenhall, W. A., Chamblee
 Morse, Chester W., 356 W. Ponce
 de Leon Ave., Decatur

Pirkle, Quentin R., 3894 Peachtree
 Road, N. E., Atlanta

Powell, F. C., 319 Church St.,
 Decatur

Sanders, Floyd R., Masonic Temple
 Bldg., Decatur

Shinall, Robert P., Jr., Masonic
 Temple Bldg., Decatur

Simmons, M. Freeman, 125 W.
 Ponce de Leon Ave., Decatur

Smith, W. P., 319 Church St.,
 Decatur

Smoot, Richard H., 215 Church St.,
 Decatur

Stewart, Thomas W., Lithonia
 Sweet, Mary F., 165 S. Candler St.,
 Decatur (Hon.)

Vinson, T. O., DeKalb County Board
 of Health, Decatur
 Vogt, Elkin, Lithonia

DOOLY COUNTY

Officers

President.....Coleman, O. K.
 Sec.-Treas.....Malloy, Martin L.
 Delegate.....Coleman, O. K.
 Alt. Delegate.....Malloy, Martin L.

Members

Coleman, O. K., Vienna
 Daves, V. C., Vienna
 Davis, E. B., Byromville
 Dean, H. B., Unadilla
 Kitchens, O. W., Byromville
 Malloy, Martin L., Vienna
 Mohley, H. A., Vienna (Hon.)

DOUGHERTY COUNTY

Officers

President.....McDaniel, J. Z.
 Vice-President.....Armstrong, E. S.
 Sec.-Treas.....Russell, Paul T.
 Delegate.....Russell, Paul T.
 Alt. Delegate.....McKemie, W. F.
 Censors: Barnett, J. M.; Keaton, J.
 C., and Redfearn, J. A.

Members

Armstrong, E. S., Albany
 Barnett, J. M., Albany
 Berg, Joseph L., Albany
 Bowman, M. B., Albany
 Brown, C. MacKenzie, Albany
 Buckner, F. W., Albany
 Cook, W. S., Albany
 Dixon, J. L., Memorial Hospital of
 Martin County, Stanton, Texas
 Feild, W. M., Albany
 Hilsman, P. L., Albany
 Holman, C. M., Albany
 Ingram, Lillian, Albany
 Irwin, I. W., Albany
 James, A. E., Albany
 Kalmon, E. H., Jr., 212 8th St.,
 S. W., Washington, D. C.
 Keaton, J. C., Albany
 Lucas, I. M., Albany
 Mann, D. S., Albany

McCall, Charles S., Jr., Albany
 McDaniel, J. Z., Albany
 McKemie, H. M., Albany
 McKemie, W. Frank, Albany
 Neill, F. K., Albany
 Parrish, Lewis H., Albany
 Redfearn, J. A., Albany
 Rhyne, W. P., Albany
 Roberson, Phil E., Albany
 Russell, Paul T., Albany
 Seymour, Glenn E., Albany
 Sutton, J. M., Jr., Albany
 Thomas, Frank E., Albany
 Thomas, N. R., Albany
 Tye, J. P., Albany
 Wolfe, David M., Albany

ELBERT COUNTY

Officers

President.....Johnson, A. S.
 Vice-President.....Mickel, Carey A., Jr.
 Sec.-Treas.....O'Neal, John B., III
 Delegate.....Thompson, D. N.
 Alt. Delegate.....O'Neal, John B., III
 Censors: Ward, G. A.; Smith, F. A.,
 and Johnson, A. S., Jr.

Members

Bailey, D. V., Elberton
 Johnson, A. S., Elberton
 Johnson, A. S., Jr., Elberton
 Johnson, J. E., Elberton (Hon.)
 Johnson, J. F., Jr., Elberton
 Johnson, W. A., Elberton
 Mattox, B. B., Elberton (Hon.)
 Mickel, Carey A., Jr., Elberton
 O'Neal, John B., III, Elberton
 O'Neal, Phyllis J., Elberton
 Smith, A. C., Elberton
 Smith, F. A., Elberton
 Thompson, D. N., Elberton
 Ward, G. A., Elberton

EMANUEL COUNTY

Officers

President.....Youmans, S. S.
 Vice-President.....Brown, R. G.
 Secretary-Treasurer.....Smith, H. W.
 Delegate.....Smith, D. D.
 Alternate Delegate.....Powell, C. E.
 Censors: Youmans, S. S.; Brown,
 R. G., and Powell, C. E.

Members

Brown, R. G., Swainsboro
 Powell, C. E., Swainsboro
 Smith, D. D., Swainsboro
 Smith, H. W., Swainsboro
 Youmans, W. W., Swainsboro

FLOYD COUNTY

Officers

President.....Bosworth, Edward L.
 Vice-President.....Battle, Lee H., Jr.
 Sec.-Treas.....Andrews, Russell E., Jr.
 Delegate.....Battle, Lee H., Jr.
 Censors: McCall, John T.; Gilbert,
 Warren, and McCord, Ralph B.

Members

Andrews, Russell E., Jr., Rome
 Banister, W. G., R.F.D. 2, Rome
 (Hon.)
 Battle, Lee H., Jr., Rome
 Black, Robert J., Rome
 Blalock, Frank A., Battey State
 Hospital, Rome

Bosworth, Edward L., Rome
 Brannon, Emmett, Rome
 Brooks, Wm. H., Rome
 Cagle, W. D., Battey State Hos-
 pital, Rome
 Chandler, J. L., Rome (Hon.)
 Coslett, Floyd, Battey State Hos-
 pital, Rome
 Crawford, J. M., Cave Spring
 Crenshaw, Fred, Battey State Hos-
 pital, Rome
 Crow, H. E., Battey State Hospital,
 Rome
 Davis, Ralph J., Rome
 Dawson, Harry, Shannon
 Dellinger, Raiden W., Rome
 Elmore, B. V., Rome
 Garner, J. S., Jr., U. S. Marines
 Garrard, J. L., Rome
 Gilbert, Warren M., Rome
 Hackett, Walter G., Rome
 Harbin, B. Lester, Rome
 Harbin, R. M., Jr., Rome
 Harbin, Thomas S., Rome
 Harbin, William P., Jr., Rome
 Jenkins, O. W., Lindale
 Johnson, Ralph N., Rome
 Ketchum, Walter H., Battey State
 Hospital, Rome
 Lewis, Wm. H., Rome
 McCall, J. T., Rome
 McCall, J. T., Jr., Rome
 McCord, M. M., Rome
 McCord, Ralph B., Rome
 Methvin, S. R., Lindale (Hon.)
 Moore, C. W. Cary, Rome
 Moore, Clifford, Lindale
 Moore, Cliff, Jr., Rome
 Moss, T. H., Rome
 Mull, J. H., Rome
 Norton, John H., Jr., Cave Spring
 Norton, Robert F., Rome
 Orton, Sarah P., Battey State Hos-
 pital, Rome
 Payne, Rufus F., Battey State Hos-
 pital, Rome
 Perkins, George E., II, Battey State
 Hospital, Rome
 Routledge, A. F., Rome
 Sapp, Clarence J., Rome
 Sewell, W. A., Rome (Hon.)
 Smith, George B., Rome
 Smith, Inman, Rome
 Wyatt, C. J., Jr., Rome

FORSYTH COUNTY

Officers

President.....Mashburn, Marcus, Jr.
 Sec.-Treas.....Mashburn, James S.

Members

Bramblett, Rupert H., Route 3,
 Cumming
 Dunn, Wm. Robert, Cumming
 Lipscomb, W. E., Cumming
 Mashburn, James S., Cumming
 Mashburn, Marcus, Cumming
 Mashburn, Marcus, Jr., Cumming

FRANKLIN COUNTY

Officers

President.....Brown, Stewart D.
 Sec.-Treas.....Poole, E. T.
 Delegate.....Brown, Stewart D.
 Alt. Delegate.....Ridgway, Robert E.

Members

Brown, Stewart D., Royston

Parker, G. M., Carnesville
 Poole, E. T., Lavonia
 Ridgway, Robert E., Royston
 Smith, B. T., Carnesville
 Williams, John Weldon, Jr.,
 Lavonia

FULTON COUNTY

Officers

President.....Linch, A. O.
 President-Elect.....Davison, Hal M.
 V-President.....Strickler, Cyrus W., Jr.
 Sec.-Treas.....Hobby, A. Worth
 Delegate.....Linch, A. O.
 Delegate.....Brown, Stephen T.
 Delegate.....Davison, Hal M.
 Delegate.....Allen, A. E.
 Delegate.....Hobby, A. Worth
 Delegate.....Hamm, William G.
 Delegate.....Norris, Jack C.
 Delegate.....Strickler, Cyrus W., Jr.
 Delegate.....Turner, John W.
 Delegate.....Fowler, Major F.
 Delegate.....Davis, Shelley C.
 Delegate.....Martin, J. D., Jr.
 Delegate.....Roberts, C. Purcell

Members

Abbott, Osler A., Emory University
 Hospital, Emory University
 Abercrombie, T. F., Ga. Dept. of
 Public Health, Atlanta (Hon.)
 Adams, Charles C., 3075 Peachtree
 Rd., N. E., Atlanta
 Adams, C. R., 840 Gordon St., S.
 W., Atlanta
 Adams, Guy H., 85 Merritts Ave.,
 N. E., Atlanta
 Adams, H. M. S., Candler Bldg.,
 Atlanta
 Adams, Harold W., 840 Gordon St.,
 S. W., Atlanta
 Agnor, Elbert B., Medical Arts
 Bldg., Atlanta
 Aiken, W. S., First Natl. Bank
 Bldg., Atlanta
 Akin, John T., Jr., 35 Fourth St.,
 N. E., Atlanta
 Alden, Herbert S., Medical Arts
 Bldg., Atlanta
 Allen, E. A., Medical Arts Bldg.,
 Atlanta
 Allgood, Pierce, 478 Peactree St.,
 N. E., Atlanta
 Allison, Gordon G., Grant Bldg.,
 Atlanta
 Almand, Claude A., 717 Brookridge
 Drive, N. E., Atlanta
 Anderson, Robert T., Coleman Hos-
 pital, -Dublin
 Anderson, S. A., 36 Sheridan Drive,
 N. E., Atlanta
 Anderson, W. W., 478 Peachtree
 St., N. E., Atlanta
 Armstrong, T. B., 1404 North Ave.,
 N. E., Atlanta (Hon.)
 Armstrong, W. B., 490 Peachtree
 St., N. E., Atlanta
 Arnold, W. A., Peters Bldg., At-
 lanta
 Arp, C. Raymond, 478 Peachtree
 St., N. E., Atlanta
 Arrington, Robt. Glenn, 923 Twelfth
 St., Huntington, W. Va. (Asso.)

- Artega, Oliver, 152 Forrest Ave., N. E., Atlanta
- Arthur, J. F., 828 Adair Ave., N. E., Atlanta
- Askew, Rufus A., 10 Pryor St. Bldg., Atlanta
- Askren, E. L., Jr., 126 Forrest Ave., N. E., Atlanta
- Atkins, F. M., 478 Peachtree St., N. E., Atlanta
- Atwater, John S., 478 Peachtree St., N. E., Atlanta
- Anstin, Andrew C., 1218 S. Oxford Rd., N. E., Atlanta
- Aven, C. C., Medical Arts Bldg., Atlanta
- Ayer, Guy D., 563 Paces Ferry Road, N. W., Atlanta (Hon.)
- Ayer, Darrell, Jr., Crawford W. Long Mem. Hospital, Atlanta
- Ayers, Sanford E., 248 Pharr Rd., N. E., Atlanta
- Bachmann, J. George, 478 Peachtree St., N. E., Atlanta
- Baggett, L. G., 478 Peachtree St., N. E., Atlanta
- Bailey, M. K., Medical Arts Bldg., Atlanta
- Baird, James B., 62 28th St., N. W., Atlanta (Hon.)
- Baird, J. Mason, Medical Arts Bldg., Atlanta
- Baird, Noah W., 541 Lee St., S. W., Atlanta
- Baker, Luther P., Peters Bldg., Atlanta
- Baker, W. Pope, 979 Springdale Rd., N. E., Atlanta (Hon.)
- Ballenger, W. L., 1302 Emory Road, N. E., Atlanta
- Banker, E. A., 478 Peachtree St., N. E., Atlanta
- Banks, Rafe, Jr., Grady Mem. Hospital, Atlanta (Asso.)
- Barnes, John Jahu, 33 Ponce de Leon Ave., N. E., Atlanta
- Barnett, Crawford F., 478 Peachtree St., N. E., Atlanta
- Barnett, Stephen T., 26 Linden Ave., N. E., Atlanta
- Barrow, Jos. Gordon, 1028 W. Peachtree St., N. W., Atlanta
- Bartholomew, R. A., 1259 Clifton Rd., N. E., Atlanta
- Bartlett, Walter M., 125 Michigan Ave., Decatur
- Batemen, Gregory W., Grand Theatre Bldg., Atlanta
- Batemen, Needham B., Candler Bldg., Atlanta
- Bateman, Wm. H., Grand Theatre Bldg., Atlanta (Asso.)
- Beard, Donald E., 490 Peachtree St. St., N. E., Atlanta
- Beasley, B. T., Hurt Bldg., Atlanta
- Beeson, Paul B., Grady Mem. Hospital, Atlanta
- Bennett, Wm. H., Medical Arts Bldg., Atlanta
- Benson, H. Bagley, 490 Peachtree St., N. E., Atlanta
- Benson, Marion T., Jr., 704 Piedmont Ave., N. E., Atlanta
- Berger, Louis, 662 W. Peachtree St., N. W., Atlanta
- Berry, Maxwell, 1010 W. Peachtree St., N. W., Atlanta
- Bishop, Everett L., Medical Arts Bldg., Atlanta
- Bivings, F. Lee, 20 Fourth St., N. W., Atlanta
- Bivings, Wm. Troy, 756 Cypress St., N. E., Atlanta (Hon.)
- Blackford, L. Minor, 104 Ponce de Leon Ave., N. E., Atlanta
- Blackman, W. W., 418 Capitol Ave., S. E., Atlanta (deceased)
- Blaine, B. C., 2018 Hollywood Rd., N. W., Atlanta
- Blalock, J. C., Medical Arts Bldg., Atlanta
- Blalock, Tully T., 490 Peachtree St., N. E., Atlanta
- Blandford, W. C., Candler Bldg., Atlanta
- Bleich, J. K., 490 Peachtree St., N. E., Atlanta
- Bloom, Walter L., 845 Clifton Rd., N. E., Atlanta
- Blumberg, Max M., 35 Fourth St., N. E., Atlanta
- Blumberg, Richard W., 33 Ponce de Leon Ave., N. E., Atlanta
- Boger, Richard E., 490 Peachtree St., N. E., Atlanta
- Boland, Charles G., 159 Forrest Ave., N. E., Atlanta
- Boland, Frank K., 478 Peachtree St., N. E., Atlanta
- Boland, F. Kells, Jr., 478 Peachtree St., N. E., Atlanta
- Boland, Joseph H., 478 Peachtree St., N. E., Atlanta
- Boling, Edgar, 490 Peachtree St., N. E., Atlanta
- Bondurant, H. Wm., 478 Peachtree St., N. E., Atlanta
- Bondy, Philip K., Grady Mem. Hospital, Atlanta (Asso.)
- Bonner-Miller, Lila Morse, 763 Juniper St., N. E., Atlanta
- Bowcock, Chas. M., Dallas, Texas (Asso.) (deceased)
- Bowdoin, C. Dan., Ga. Dept. of Public Health, Atlanta
- Boyd, B. Hartwell, 56 Fifth St., N. E., Atlanta
- Boyd, Montague L., 563 Capitol Ave., S. W., Atlanta
- Boynton, C. E., P. O. Box 122, Ponte Vedra Beach, Fla. (Hon.)
- Boynton, Estelle P., 105 Pryor St., N. E., Atlanta
- Brackett, John Gordon, 478 Peachtree St., N. E., Atlanta
- Brawley, Wm. Gaston, 20 Fourth St., N. W., Atlanta
- Brawner, Albert F., 478 Peachtree St., N. E., Atlanta
- Brawner, J. N., 2800 Peachtree Rd., N. E., Atlanta
- Brawner, J. N., Jr., 262 W. Wesley Rd., N. W., Atlanta
- Brewer, Frank B., Area Medical Officer VA, Atlanta (Asso.)
- Bridges, Glenn J., Medical Arts Bldg., Atlanta
- Brown, Charles E., 21 Eighth St., N. E., Atlanta
- Brown, Joseph C., Conyers
- Brown, Lester A., 490 Peachtree St., N. E., Atlanta
- Brown, Robert H., 144 Ponce de Leon Ave., N. E., Atlanta
- Brown, Robert L., Emory University Hospital, Emory University
- Brown, S. Ross, 1000 Peachtree Battle Ave., N. W., Atlanta
- Brown, Samuel Y., 478 Peachtree St., N. E., Atlanta
- Brown, Stephen T., Medical Arts Bldg., Atlanta
- Bryan, William W., 490 Peachtree St., N. E., Atlanta
- Buesing, Oliver R., 106 Physiology Bldg., Emory University (Asso.)
- Bunce, Allen H., 98 Currier St., N. E., Atlanta
- Burch, J. C., 11 Hunter St., S. W., Atlanta
- Burge, Dan, 21 Eighth St., N. E., Atlanta
- Burgess, Taylor S., Medical Arts Bldg., Atlanta
- Burke, B. Russell, 490 Peachtree St., N. E., Atlanta
- Burnett, Stacy W., 56 Fifth St., N. E., Atlanta
- Burson, E. Napier, Jr., 34 Seventh St., N. E., Atlanta
- Bush, O. B., 1996 Bankhead Highway, N. W., Atlanta
- Byers, Kathleen, Piedmont Hospital, Atlanta
- Byram, James H., Grand Theatre Bldg., Atlanta
- Byrd, Edwin S., 1207 Oxford Rd., N. E., Atlanta (Hon.)
- Byrd, T. Luther, 478 Peachtree St., N. E., Atlanta
- Cale, E. F., 33 Ponce de Leon Ave., N. E., Atlanta
- Calhoun, F. P., 478 Peachtree St., N. E., Atlanta
- Calhoun, F. P., Jr., 478 Peachtree St., N. E., Atlanta
- Camp, R. T., Fairburn
- Campbell, John D., 490 Peachtree St., N. E., Atlanta
- Campbell, Roy E., Grady Mem. Hospital, Atlanta (Asso.)
- Campbell, Wm. E., Jr., Medical Arts Bldg., Atlanta
- Candler, Robert W., 490 Peachtree St., N. E., Atlanta
- Carter, A. W., Jr., Forest Park
- Carter, Sandy B., Jr., 34 Seventh St., N. E., Atlanta
- Cason, Wm. M., U. S. Naval Ordnance Depot, Pudget Sound, Keyport, Wash.
- Cathcart, Don F., 490 Peachtree St., N. E., Atlanta
- Catron, I. T., Candler Bldg., Atlanta (Hon.)
- Chalmers, Rives, 490 Peachtree St., N. E., Atlanta
- Chambers, Benjamin M., Grant Bldg., Atlanta
- Champion, W. L., 490 Peachtree St., N. E., Atlanta (Hon.)

- Chappell, Amey, 795 Peachtree St., N. E., Atlanta
- Childs, J. R., Medical Arts Bldg., Atlanta
- Christian, Wm. H., Jr., 81 Walton St., N. W., Atlanta (Asso.)
- Christopher, F. E., Hurt Bldg., Atlanta
- Claiborne, T. Sterling, Medical Arts Bldg., Atlanta
- Clark, J. J., 478 Peachtree St., N. E., Atlanta
- Clarke, M. L. B., Candler Bldg., Atlanta
- Clifton, Ben H., 478 Peachtree St., N. E., Atlanta
- Codington, Arthur B., Medical Arts Bldg., Atlanta
- Cofer, Olin S., 478 Peachtree St., N. E., Atlanta
- Cohen, Isidore R., 26 Linden Ave., N. E., Atlanta
- Cole, G. C., 533 Eight St., N. W., Atlanta (Hon.)
- Coleman, Reese C., Jr., 490 Peachtree St., N. E., Atlanta
- Coles, Wm. C., 272 Courtland St., N. E., Atlanta
- Collier, T. J., 1781 Peachtree Rd., N. E., Atlanta
- Collinsworth, A. M., 663 W. Peachtree St., N. E., Atlanta
- Collinsworth, P. L., Candler Bldg., Atlanta
- Colvin, E. D., 1259 Clifton Rd., N. E., Atlanta
- Colvin, E. S., Healey Bldg., Atlanta
- Combs, J. A., 478 Peachtree St., N. E., Atlanta
- Combs, James M., Candler Bldg., Atlanta
- Cooke, Virgil C., 3010 Waverly Ave., Tampa 9, Fla.
- Cooper, Fred W., Jr., Emory University Hospital, Emory University
- Copeloff, M. B., Mortgage Guarantee Bldg., Atlanta
- Coppedge, W. W., 106 N. East Point St., East Point
- Corley, F. L., Peters Bldg., Atlanta
- Cousins, W. L., Candler Bldg., Atlanta
- Cowan, Z. S., Clearwater, Fla., (Hon.)
- Crawford, Clyde L., 652 W. Peachtree St., N. W., Atlanta
- Crawford, H. C., 478 Peachtree St., N. E., Atlanta
- Crawford, J. H., Grant Bldg., Atlanta
- Crismon, Lester C., Lago Oil & Transport Co., Ltd., Medical Dept., Aruba, N.W.I. (Asso.)
- Crispell, Raymond S., Area Medical Officer VA, Atlanta (Asso.)
- Cross, John B., Medical Arts Bldg., Atlanta
- Crowe, Wm. R., 490 Peachtree St., N. E., Atlanta
- Cruise, Joe S., Medical Arts Bldg., Atlanta
- Cummings, Martin M., Lawson VA Hospital, Chamblee (Asso.)
- Curtis, Walker L., 104½ N. Main St., College Park
- Dabney, W. C., Ocean Springs, Miss. (Hon.)
- Daly, Leo P., Medical Arts Bldg., Atlanta
- Daniel, Charles H., College Park (deceased)
- Daniel, W. W., 743 W. Peachtree St., N. E., Atlanta
- Daniels, Charles W., 760 W. Peachtree St., N. W., Atlanta
- Davenport, T. F., 104 Ponce de Leon Ave., N. E., Atlanta
- Davidson, John K., III, Emory University Hospital, Emory University (Asso.)
- Davis, J. E., Grand Theatre Bldg., Atlanta
- Davis, M. Bedford, Jr., Lawson VA Hospital, Chamblee (Asso.)
- Davis, Robert Carter, 98 Currier St., N. E., Atlanta
- Davis, Shelley C., 35 Linden St., N. E., Atlanta
- Davis, W. Ben, 115 S. Main St., College Park
- Davison, Hal M., 478 Peachtree St., N. E., Atlanta
- Davison, T. C., 478 Peachtree St., N. E., Atlanta
- Dean, Wm. J., Grady Mem. Hospital, Atlanta (Asso.)
- Denham, Samuel W., Jr., Grady Mem. Hospital, Atlanta (Asso.)
- Denmark, Leila D., 5605 Glenridge Drive, N. E., Atlanta
- Dennison, David B., 478 Peachtree St., N. E., Atlanta
- Denton, J. F., 478 Peachtree St., N. E., Atlanta
- Dew, J. Harris, 126 Forrest Ave., N. E., Atlanta
- Dickson, Roger W., 27 Fourth St., N. E., Atlanta
- Dimmock, Avary M., Hurt Bldg., Atlanta
- Dixon, Pierce K., Jr., Lawson VA Hospital, Chamblee
- Dobes, Wm. L., 478 Peachtree St., N. E., Atlanta
- Dobson, J. L., 27 Fourth St., N. E., Atlanta
- Dorough, W. S., 478 Peachtree St., N. E., Atlanta
- Dougherty, Mark S., 98 Currier St., N. E., Atlanta
- Dowman, Charles E., 1415 Peachtree St., N. E., Atlanta
- Dowman, Cordelia K., 3162 Peachtree Drive, N. E., Atlanta
- Dunbar, Ernest A., Jr., Candler Bldg., Atlanta
- Duncan, John B., 478 Peachtree St., N. E., Atlanta
- Dunlap, E. B., Jr., Medical Arts Bldg., Atlanta
- Dunstan, Edgar M., 478 Peachtree St., N. E., Atlanta
- DuVall, W. B., 26 Linden Ave., N. E., Atlanta
- Earle, Walter C., 1930 Greystone Rd., N. E., Atlanta
- Eberhart, Charles A., 704 Piedmont Ave., N. E., Atlanta
- Edgerton, M. T., Candler Bldg., Atlanta
- Edwards, Wm. T., Jr., 490 Peachtree St., N. E., Atlanta
- Elkin, Dan C., Emory University Hospital, Emory University
- Ellis, John O., Medical Arts Bldg., Atlanta
- Elmer, Richard A., 35 Linden Ave., N. E., Atlanta
- Equen, Murdock, 144 Ponce de Leon Ave., N. E., Atlanta
- Eskridge, Frank, 736 W. Peachtree St., N. W., Atlanta
- Estes, Edward H., Jr., Grady Mem. Hospital, Atlanta (Asso.)
- Estes, H. C., 490 Peachtree St., N. E., Atlanta
- Etheridge, I. H., Peters Bldg., Atlanta
- Evans, Albert L., 478 Peachtree St., N. E., Atlanta
- Evans, Edwin C., Medical Arts Bldg., Atlanta
- Ezzard, Thomas M., Roswell
- Fancher, J. K., 478 Peachtree St., N. E., Atlanta
- Fanning, O. O., 399 W. Ontario Ave., S. W., Atlanta (Hon.)
- Felber, Ernest, 157 Forrest Ave., N. E., Atlanta
- Felder, Richard E., Grady Mem. Hospital, Atlanta (Asso.)
- Ferguson, I. A., 478 Peachtree St., N. E., Atlanta
- Ferris, Harold A., Candler Bldg., Atlanta
- Fincher, Edgar F., Emory University Hospital, Emory University
- Fischer, L. C., 35 Linden Ave., N. E., Atlanta (Hon.)
- Fish, John S., 1259 Clifton Rd., N. E., Atlanta
- Fisher, Wilton M., U. S. Public Health Service, Atlanta (Asso.)
- Fitts, John B., 31 LaFayette Dr., N. E., Atlanta
- Florence, Thomas J., 490 Peachtree St., N. E., Atlanta
- Floyd, Earl H., 478 Peachtree St., N. E., Atlanta
- Foraker, Alvan G., Grady Mem. Hospital, Atlanta (Asso.)
- Fort, Chester A., Jr., Medical Arts Bldg., Atlanta
- Foster, Kimsey E., College Park
- Foster, Maude E., 290 Eighth St., N. E., Atlanta (Hon.)
- Fowler, C. Dixon, 27 Eighth St., N. E., Atlanta
- Fowler, Major F., 490 Peachtree St., N. E., Atlanta
- Freedman, Milton H., 21 Eighth St., N. E., Atlanta
- Freeman, Thomas R., 513 Whitaker St., Savannah (Asso.)
- Friedewald, Wm. Frank, Grady Mem. Hospital, Atlanta
- Frierson, Norton, Jr., Medical Arts Bldg., Atlanta
- Fuller, George W., 478 Peachtree St., N. E., Atlanta
- Funke, John, 712 Durant Place, N. E., Atlanta

- Funkhouser, W. L., 33 Ponce de Leon Ave., N. E., Atlanta
- Gabler, Regina, Grant Bldg., Atlanta
- Galamhos, Robert, Memorial Hall, Cambridge 38, Mass. (Asso.)
- Galloway, William H., East Atlanta Bank Bldg., Atlanta
- Galvin, Wm. H., Emory University Hospital, Emory University
- Cambrell, W. Elizabeth, 795 Peachtree St., N. E., Atlanta
- Garner, John P., 524 Flat Shoals Ave., S. E., Atlanta
- Garner, J. R., 794 Springdale Rd., N. E., Atlanta (Hon.)
- Gay, Brit B., Jr., Lawson VA Hospital, Chamblee (Asso.)
- Gay, J. Gaston, 104 Ponce de Leon Ave., N. E., Atlanta
- Gay, T. Bolling, 27 Eighth St., N. E., Atlanta
- Geiser, Frank M., 663 W. Peachtree St., N. E., Atlanta
- Geist, George A., 75 Ponce de Leon Apts., N. E., Atlanta
- Gerling, John J., 267 E. Paces Ferry Rd., N. E., Atlanta
- Germain, A. H., Candler Bldg., Atlanta
- Gershon, Nathan I., 727 W. Peachtree St., N. E., Atlanta
- Gibbs, Robert I., Jr., Lawson VA Hospital, Chamblee (Asso.)
- Gibson, Frank L., Grady Mem. Hospital, Atlanta (Asso.)
- Gibson, John S., Ga. Dept. of Public Health, Atlanta (Asso.)
- Giddings, C. G., 63 28th St., N. W., Atlanta (Hon.)
- Giddings, Glenville, 478 Peachtree St., N. E., Atlanta
- Giddings, Glenville A., Emory University Hospital, Emory University (Asso.)
- Gillespie, Robert H., 18 Fourth St., N. W., Atlanta
- Gillette, Harriet E., 928 Peachtree St., N. E., Atlanta
- Ginder, David R., Emory University School of Medicine, Emory University (Asso.)
- Glenn, Wadley R., 35 Linden Ave., N. E., Atlanta
- Glisson, C. Stedman, Jr., Medical Arts Bldg., Atlanta
- Gold, Perry, 54 Sixth St., N. E., Atlanta
- Golden, Abner, Emory University Hospital, Emory University (Asso.)
- Goldsmith, W. S., 36 N. Coates St., Daytona Beach, Fla. (Hon.)
- Goodpasture, W. C., Medical Arts Bldg., Atlanta
- Goodwin, Franklin H., 478 Peachtree St., N. E., Atlanta
- Goodwyn, Thomas P., 478 Peachtree St., N. E., Atlanta
- Goodyear, Wm. E., 490 Peachtree St., N. E., Atlanta
- Gordon, Samuel L., 171 E. Post Rd., White Plains, N. Y.
- Graydon, E. L., 680 W. Peachtree St., N. W., Atlanta
- Green, Loula Margaret, 27 Eighth St., N. E., Atlanta
- Greenberg, Irving L., Grant Bldg., Atlanta
- Greene, Edgar H., 478 Peachtree St., N. E., Atlanta
- Gregory, Hugh Hyden, Grady Mem. Hospital, Atlanta (Asso.)
- Griffin, Claude, Medical Arts Bldg., Atlanta
- Griffin, Eugene L., 1282 S. Oxford Rd., N. E., Atlanta
- Grimes, Wm. H., Jr., 1259 Clifton Rd., N. E., Atlanta
- Grove, Lon W., Medical Arts Bldg., Atlanta
- Guilfoil, Paul H., Lawson VA Hospital, Chamblee (Asso.)
- Hackney, J. F., Health Dept. City Hall, Atlanta
- Hailey, Howard, 478 Peachtree St., N. E., Atlanta
- Hailey, Hugh, Medical Arts Bldg., Atlanta
- Hallum, Alton V., 478 Peachtree St., N. E., Atlanta
- Hamff, L. Harvey, 478 Peachtree St., N. E., Atlanta
- Hamm, Wm. G., Medical Arts Bldg., Atlanta
- Hancock, Robert K., 663 W. Peachtree St., N. E., Atlanta
- Hanes, O. Eugene, 573 W. Peachtree St., N. E., Atlanta
- Hankey, Daniel D., Grady Mem. Hospital, Atlanta (Asso.)
- Hanner, James P., Medical Arts Bldg., Atlanta
- Harper, Byron F., Jr., 561 Lee St., St. W., Atlanta
- Harris, J. Frank, Medical Arts Bldg., Atlanta
- Hathcock, Wm. C., Grand Theatre Bldg., Atlanta
- Hauck, Allen E., 478 Peachtree St., N. E., Atlanta
- Haynes, Grady O., VA Tuberculosis Hospital, Atlanta (Asso.)
- Hearin, David L., 478 Peachtree St., N. E., Atlanta (Asso.)
- Hecht, Emanuel B., 1181 Lee St., S. W., Atlanta
- Helms, Wm. C., 490 Peachtree St., N. E., Atlanta
- Hendry, Wayland M., 478 Peachtree St., N. E., Atlanta
- Henry, Lamont, 30 Prescott St., N. E., Atlanta
- Hess, George, 505 McDonough Blvd., S. E., Atlanta (deceased)
- Hewell, Guy C., 33 Ponce de Leon Ave., N. E., Atlanta
- Heyman, Albert, Grady Mem. Hospital, Atlanta
- Heyser, D. T., 190 Boulevard, S. E., Atlanta
- Highsmith, E. D., 622 Moreland Ave., N. E., Atlanta (Hon.)
- Hill, Haywood N., 478 Peachtree St., N. E., Atlanta
- Hill, Wm. H., 478 Peachtree St., N. E., Atlanta
- Hilsman, Joseph H., Jr., 123 Forrest Ave., N. E., Atlanta
- Hines, John H., Roswell
- Hobby, A. Worth, 490 Peachtree St., N. E., Atlanta
- Hockenhull, John A., 1014 Hemphill Ave., N. W., Atlanta
- Hodges, Fred B., Jr., 478 Peachtree St., N. E., Atlanta
- Hodges, J. H., Hapeville
- Hodges, W. A., 492 Page Ave., N. E., Atlanta (Hon.)
- Hodgson, F. G., Medical Arts Bldg., Atlanta
- Hoffman, Byron J., 768 Juniper St., N. E., Atlanta
- Holliman, Henry D., Jr., 490 Peachtree St., N. E., Atlanta
- Holloway, Charles E., 490 Peachtree St., N. E., Atlanta
- Holloway, George A., 33 Ponce de Leon Ave., N. E., Atlanta
- Holmes, Walter R., 478 Peachtree St., N. E., Atlanta
- Hope, H. F., 663 Greenview Ave., N. E., Atlanta
- Hopkins, William A., Emory University Hospital, Emory University
- Hoppe, L. D., Medical Arts Bldg., Atlanta
- Horton, B. E., Grand Theatre Bldg., Atlanta (Hon.)
- Howard, Chas. K., 561 Lee St., S. W., Atlanta
- Howard, P. M., 431 E. John Wesley Ave., College Park
- Howell, Stacy C., 490 Peachtree St., N. E., Atlanta
- Hrdlicka, George R., 551 Capitol Ave., S. W., Atlanta
- Hudson, Paul L., Trust Co. of Ga. Bldg., Atlanta
- Hughes, David J., Grady Mem. Hospital, Atlanta (Asso.)
- Huguley, Charles M., Jr., Emory University Hospital, Emory University
- Huguley, G. Pope, 126 Forrest Ave., N. E., Atlanta
- Huie, Robert E., East Atlanta Bank Bldg., Atlanta
- Hunter, Conway, 770 Cypress St., N. E., Atlanta
- Hurst, John W., 478 Peachtree St., N. E., Atlanta
- Hutchins, J. T., 1704 Lakewood Ave., S. E., Atlanta
- Hydrick, Peter, 105 W. Princeton Ave., College Park
- Inman, John S., Jr., Crawford W. Long Mem. Hospital, Atlanta (Asso.)
- Ivey, John C., 743 W. Peachtree St., N. E., Atlanta
- Jackson, Zack W., 478 Peachtree St., N. E., Atlanta
- Jacobs, John L., 490 Peachtree St., N. E., Atlanta
- James, David F., Emory University Hospital, Emory University
- Jenkins, M. K., 248 Randolph St., N. E., Atlanta
- Jennings, James L., 152 Forrest Ave., N. E., Atlanta

- Jernigan, H. Walker, 478 Peachtree St., N. E., Atlanta
 Jernigan, Sterling H., 57 Sixth St., N. E., Atlanta
 Johnson, McClaren, 478 Peachtree St., N. E., Atlanta
 Jones, Charles S., 663 W. Peachtree St., N. E., Atlanta
 Jones, Eugenia C., 478 Peachtree St., N. E., Atlanta
 Jones, Jack W., Medical Arts Bldg., Atlanta
 Josephs, Alvin D., 663 W. Peachtree St., N. E., Atlanta
 Kalish, John T., VA Tuberculosis Hospital, Atlanta (Asso.)
 Kane, Thos. M., Grand Theatre Bldg., Atlanta
 Kanthak, Frank F., Medical Arts Bldg., Atlanta
 Keller, A. Paul, Jr., Lawson VA Hospital, Chamblee (Asso.)
 Kelley, L. H., 478 Peachtree St., N. E., Atlanta
 Kelley, W. A., 478 Peachtree St., N. E., Atlanta
 Kelly, James D., 2724 Atwood Rd., N. E., Atlanta
 Kelly, Robert P., Jr., Emory University Hospital, Emory University
 Kemper, Clifton G., 478 Peachtree St., N. E., Atlanta
 Ketron, Hubert W., 2855 Peachtree Rd., N. W., Atlanta (Asso.)
 Key, Claud T., 1398 Beecher St., S. W., Atlanta
 King, Richard, 478 Peachtree St., N. E., Atlanta
 King, James T., Medical Arts Bldg., Atlanta
 King, John D., 35 Linden Ave., N. E., Atlanta
 King, Lewell S., 105 W. Princeton Ave., College Park
 Kirkland, Spencer A., 478 Peachtree St., N. E., Atlanta
 Kiser, Ellen Finley, 210 Peachtree Circle, N. E., Atlanta (Asso.)
 Kiser, W. H., Jr., 33 Ponce de Leon Ave., N. E., Atlanta
 Kite, J. Hiram, 490 Peachtree St., N. E., Atlanta
 Klugh, George F., 736 Piedmont Ave., N. E., Atlanta
 Koff, S. A., 805 Peachtree Bldg., Atlanta
 Kraft, H. N., Candler Bldg., Atlanta
 Krantz, Simon, Lawson VA Hospital, Chamblee (Asso.)
 Krugman, Philip I., 727 W. Peachtree St., N. E., Atlanta
 Lahman, Rose A., 795 Peachtree St., N. E., Atlanta
 Lamm, J. Herman, Medical Arts Bldg., Atlanta
 Landham, J. W., 736 Piedmont Ave., N. E., Atlanta
 Lange, J. Harry, 490 Peachtree St., N. E., Atlanta
 Langmuir, Alexander D., U. S. Public Health Service, Atlanta (Asso.)
 Lawrence, Charles E., Candler Bldg., Atlanta
 Laws, C. L., Medical Arts Bldg., Atlanta
 Leadingham, R. S., U. S. VA Hospital, Murfreesboro, Tenn.
 Lee, C. A., Citizens & Son. Natl. Bank Bldg., Atlanta
 Leigh, Ted F., Emory University Hospital, Emory University
 Leonard, Wm. P., 478 Peachtree St., N. E., Atlanta
 Lester, Wm. M., 1259 Clifton Rd., N. E., Atlanta
 Letton, A. H., 478 Peachtree St., N. E., Atlanta
 Levin, Harold B., 662 W. Peachtree St., N. W., Atlanta
 Levin, Jack M., 727 W. Peachtree St., N. E., Atlanta
 Levy, Louis K., 663 W. Peachtree St., N. E., Atlanta
 Lewis, John R., Jr., 478 Peachtree St., N. E., Atlanta
 Linch, A. O., 157 Forrest Ave., N. E., Atlanta
 Lineback, Merrill I., Mass. Eye and Ear Infirmary, Boston, Mass. (Asso.)
 Lipman, B. S., 663 W. Peachtree St., N. E., Atlanta
 Lipcomb, Laura, India
 Lipton, Harry R., 490 Peachtree St., N. E., Atlanta
 Logue, R. Bruce, Emory University Hospital, Emory University
 Lokev, H. M., Medical Arts Bldg., Atlanta
 Long, Leonard, Ga. Baptist Hospital, Atlanta
 Long, Stewart McL., Medical Arts Bldg., Atlanta
 Longino, D. R., 1344 Lanier Blvd., N. E., Atlanta
 Longino, Grady E., 11th-Evacuation Hospital, Ft. Hood, Tex. (Asso.)
 Lovell, Woodrow W., Medical Arts Bldg., Atlanta
 Lower, Emory G., 745 Marietta St., N. W., Atlanta (deceased)
 Lowance, Mason I., 478 Peachtree St., N. E., Atlanta
 Ludington, Louis G., Ga. Baptist Hospital, Atlanta (Asso.)
 Lunsford, Guy G., 4010 Osborne Rd., Chamblee
 Lyon, Harry C., 677 Ponders Ave., N. W., Atlanta
 Mabon, Robert, 478 Peachtree St., N. E., Atlanta
 Maddox, Mr. Robert F., First National Bank Bldg., Atlanta (Hon.)
 Maholick, Leonard T., U. S. Army, Washington, D. C. (Asso.)
 Main, Emory H., 105 W. Princeton Ave., College Park
 Malone, O. T., 157 Forrest Ave., N. E., Atlanta
 Mandel, Emanuel E., U. S. Public Health Service, Chamblee (Asso.)
 Manget, J. D., 118 Forrest Ave., N. E., Atlanta
 Manget, J. D., Jr., 118 Forrest Ave., N. E., Atlanta
 Marsh, Lucille Johnson, U. S. Children's Bureau, Atlanta (Asso.)
 Martin, Anthony J., 940 W. Peachtree St., N. W., Atlanta
 Martin, Elisabeth, 56 Fifth St., N. E., Atlanta
 Martin, J. D., Jr., Emory University Hospital, Emory University
 Martin, J. J., Edison
 Martin, Wm. B., 1010 W. Peachtree St., N. W., Atlanta
 Martin, W. O., Jr., 478 Peachtree St., N. E., Atlanta
 Marvin, Charles P., 1010 W. Peachtree St., N. W., Atlanta
 Massee, Joseph C., 21 Eighth St., N. E., Atlanta
 Matthews, O. H., 735 Piedmont Ave., N. E., Atlanta
 Matthews, Thomas V., 478 Peachtree St., N. E., Atlanta
 Matthews, Warren B., Medical Arts Bldg., Atlanta
 Mauldin, John T., 73 Eleventh St., N. E., Atlanta
 Maulding, Homer R., Medical Arts Bldg., Atlanta
 McCain, John R., Medical Arts Bldg., Atlanta
 McClelland, Spence, Medical Arts Bldg., Atlanta
 McClung, R. H., Chamber of Commerce Bldg., Atlanta
 McClure, Robert E., VA Tuberculosis Hospital, Atlanta (Asso.)
 McCord, J. R., 810 E. Fifth St., Ocala, Fla. (Hon.)
 McDaniel, J. G., Grand Theatre Bldg., Atlanta
 McDonald, Harold P., Healey Bldg., Atlanta
 McDonald, Lewis H., 490 Peachtree St., N. E., Atlanta
 McDonald, Paul, Bolton
 McDougall, J. Calhoun, Medical Arts Bldg., Atlanta
 McDougall, W. L., 478 Peachtree St., N. E., Atlanta (deceased)
 McElroy, Joseph D., 490 Peachtree St., N. E., Atlanta
 McGarity, William C., Emory University Hospital, Emory University (Asso.)
 McGee, Roy W., 160 Pryor St., S. W., Atlanta
 McGinty, A. Park, 762 Cypress St., N. E., Atlanta
 McLain, Ernest K., VA Tuberculosis Hospital, Atlanta (Asso.)
 McLoughlin, Christopher J., Medical Arts Bldg., Atlanta
 McMillan, J. C., 115 S. Main St., College Park
 McNiece, Estelle, 11 Seventeenth St., N. E., Atlanta
 McRae, Floyd W., Medical Arts Bldg., Atlanta
 Merren, David D., 53 Sixth St., N. E., Atlanta
 Merrill, Arthur J., 35 Fourth St., N. E., Atlanta
 Mestre, Ricardo, VA Area Medical Office, Atlanta (Asso.)
 Michael, Max, Jr., Lawson VA Hospital, Chamblee (Asso.)
 Miles, F. C., Grand Theatre Bldg., Atlanta

- Miller, Hal C., 478 Peachtree St., N. E., Atlanta
- Miller, Linus J., 21 LaFayette Way, N. W., Atlanta
- Mills, Clarence W., Jr., Medical Arts Bldg., Atlanta
- Mims, F. C., Route 1, Lakemont (Hon.)
- Minnich, Fredric R., 490 Peachtree St., N. E., Atlanta
- Minnich, Wm. R., Medical Arts Bldg., Atlanta
- Minor, Henry W., 157 Forrest Ave., N. E., Atlanta
- Mitchell, Charles H., Army Medical Center, Washington, D. C. (Asso.)
- Mitchell, Marvin A., 490 Peachtree St., N. E., Atlanta
- Mitchell, Wm. E., Medical Arts Bldg., Atlanta
- Moncrief, W. M., Jr., 151 Ponce de Leon Ave., N. E., Atlanta
- Monfort, J. M., 478 Peachtree St., N. E., Atlanta
- Moore, Lewis W., Peoples Bank Bldg., Winder
- Moore, Wm. W., Jr., 490 Peachtree St., N. E., Atlanta
- Morris, A. L., Fairburn
- Morris, J. L., Alpharetta
- Morris, S. L., Jr., 15 Fourth St., N. E., Atlanta
- Moseley, Thomas H., Crawford W. Long Mem. Hospital, Atlanta (Asso.)
- Mosley, Hugh G., 663 W. Peachtree St., N. E., Atlanta
- Murphy, Michael V., Jr., 21 Eighth St., N. E., Atlanta
- Murphy, Wm. J., 12 Capitol Square, S. W., Atlanta
- Murray, Samuel D., Standard Bldg., Atlanta
- Muse, L. H., Medical Arts Bldg., N. E., Atlanta
- Mvers, Martin T., Medical Arts Bldg., Atlanta
- Nabors, Dewey T., 490 Peachtree St., N. E., Atlanta
- Nardine, Gene, Oak Grove Rd., Route 2, Atlanta
- Nardone, August J., St. Joseph's Infirmary, Atlanta (Asso.)
- Neely, F., Levering, Medical Arts Bldg., Atlanta
- Nellans, C. T., 105 Pryor St., N. E., Atlanta
- Nelson, Richard M., 618 Cresthill Ave., N. E., Atlanta (Hon.)
- Nicolson, Wm. Perrin, Jr., 478 Peachtree St., N. E., Atlanta
- Niles, George A., Jr., 18 Fourth St., N. W., Atlanta
- Nippert, Philip H., 478 Peachtree St., N. E., Atlanta
- Noel, Malcolm E., 300 Capitol Ave., S. E., Atlanta
- Norris, Jack C., 490 Peachtree St., N. E., Atlanta
- Norwood, Samuel W., 564 Lee St., S. W., Atlanta
- Olds, Bomar A., 138½ Main St., College Park
- O'Neal, Buford L., 478 Peachtree St., N. E., Atlanta
- Oppenheimer, R. H., 36 Butler St., S. E., Atlanta
- Osborne, V. W., 427½ Moreland Ave., N. E., Atlanta
- Owensby, N. M., Medical Arts Bldg., Atlanta
- Paine, C. H., 123 Forrest Ave., N. E., Atlanta
- Parham, Leroy G., Medical Arts Bldg., Atlanta
- Parks, Harry, Candler Bldg., Atlanta
- Pate, Julien C., Jr., First Natl. Bank Bldg., Tampa, Fla. (Asso.)
- Patterson, John L., Jr., 1302 Emory Rd., N. E., Atlanta
- Patterson, Joseph H., 104 Ponce de Leon Ave., N. E., Atlanta
- Paulin, James E., Medical Arts Bldg., Atlanta
- Paulin, William L., Jr., Medical Arts Bldg., Atlanta
- Peacock, Lamar B., 478 Peachtree St., N. E., Atlanta
- Pendergrast, Wm. J., 478 Peachtree St., N. E., Atlanta
- Pentecost, M. P., 478 Peachtree St., N. E., Atlanta
- Perry, Samuel W., 490 Peachtree St., N. E., Atlanta
- Person, W. E., Candler Bldg., Atlanta
- Peters, Margaret Polk, 614 E. Ponce de Leon Ave., Decatur
- Petrie, Lester M., Ga. Dept. of Public Health, Atlanta
- Phillips, H. S., 1738 Homestead Ave., N. E., Atlanta
- Phyrdas, Irene A., VA Regional Office, Atlanta (Asso.)
- Pierotti, Julius V., 478 Peachtree St., N. E., Atlanta
- Pilkington, Joseph W., 204 Second St., N., St. Petersburg, Fla. (Asso.)
- Pinson, C. H., Alpharetta (Hon.)
- Pittman, James L., 473 Peachtree St., N. E., Atlanta
- Poer, David Henry, Medical Arts Bldg., Atlanta
- Poliakoff, Samuel R., 26 Linden Ave., N. E., Atlanta
- Powell, Vernon E., 763 Juniper St., N. E., Atlanta
- Pratt, Caroline K., 879 Glen Arden Way, N. E., Atlanta
- Price, Harry J., Lawson VA Hospital, Chamblee (Asso.)
- Priviteri, Charles A., VA Hospital, Buffalo, N. Y. (Asso.)
- Proctor, W. H., Jr., Lawson VA Hospital, Chamblee
- Pruce, Arthur M., 890 W. Peachtree St., N. W., Atlanta
- Pruce, Marta, VA Regional Office, Atlanta (Asso.)
- Pruitt, M. C., Medical Arts Bldg., Atlanta
- Quigley, Thomas A., Jr., Gulfport, Miss. (Asso.)
- Quillian, G. W., 1216 N. Rolfe St., Arlington, Va. (Hon.)
- Quillian, W. E., Medical Arts Bldg., Atlanta
- Ragan, W. E., Jr., 25 Third St., N. E., Atlanta
- Raiford, Morgan B., 144 Ponce de Leon Ave., N. E., Atlanta
- Rankin, Joseph L., Medical Arts Bldg., Atlanta
- Rankine, C. A. N., 3997 Peachtree Rd., Brookhaven
- Ransmeier, John C., Lawson VA Hospital, Chamblee (Asso.)
- Rapp, Edwin W., VA Tuberculosis Hospital, Atlanta (Asso.)
- Rasmussen, Earl, Medical Arts Bldg., Atlanta
- Ranber, Albert P., 490 Peachtree St., N. E., Atlanta
- Rawiser, Hubert, Candler Bldg., Atlanta
- Rayle, Albert A., 478 Peachtree St., N. E., Atlanta
- Rayle, Albert A., Jr., 36 Butler St., S. E., Atlanta
- Read, Ben S., Medical Arts Bldg., Atlanta
- Read, Joseph C., Medical Arts Bldg., Atlanta
- Redd, S. C., 645 Lee St., S. W., Atlanta
- Reed, Clinton, Candler Bldg., Atlanta
- Reed, John Hamilton, Jr., Grand Theatre Bldg., Atlanta
- Reider, Reuben F., U. S. Public Health Service, Atlanta (Asso.)
- Rhodes, C. A., 126 Forrest Ave., N. E., Atlanta
- Rice, Guy V., Ga. Dept. of Public Health, Atlanta
- Rice, Keith C., Medical Arts Bldg., Atlanta
- Richardson, Jeff L., 1023 W. Peachtree St., N. W., Atlanta
- Ridley, H. W., Grant Bldg., Atlanta
- Ridley, John H., Medical Arts Bldg., Atlanta
- Rieser, Charles, 819 Cypress St., N. E., Atlanta
- Reith, Paul L., Medical Arts Bldg., Atlanta
- Riley, Julian G., 490 Peachtree St., N. E., Atlanta
- Roach, George, 144 Ponce de Leon Ave., N. E., Atlanta
- Roberts, C. Purcell, 762 Cypress St., N. E., Atlanta
- Roberts, M. Hines, 33 Ponce de Leon Ave., N. E., Atlanta
- Robertson, Roy L., Grady Mem. Hospital, Atlanta (Asso.)
- Robinson, R. L., 1944 Bankhead Ave., N. W., Atlanta
- Rogers, J. Harry, 490 Peachtree St., N. E., Atlanta
- Rosborough, Wm. Daniel, VA Tuberculosis Hospital, Atlanta (Asso.)
- Rosenberg, Albert A., 53 Sixth St., N. E., Atlanta
- Rosenberg, H. J., 478 Peachtree St., N. E., Atlanta
- Roughlin, L. C., First Natl. Bank Bldg., Atlanta

- Rudder, Fred F., 490 Peachtree St., N. E., Atlanta
 Rumble, Lester, Jr., St. Joseph's Infirmary, Atlanta (Asso.)
 Rushin, C. E., 478 Peachtree St., N. E., Atlanta
 Russell, David A., Jr., Grand Theatre Bldg., Atlanta
 Sage, Dan Y., Medical Arts Bldg., Atlanta
 Sanchez, A. S., 84 Marietta St., Atlanta
 Sanders, A. S., 118 Forrest Ave., N. E., Atlanta
 Sandison, J. Calvin, 478 Peachtree St., N. E., Atlanta
 Scarborough, J. Elliott, Emory University Hospital, Emory University
 Scheinbaum, C. N., 1019 W. Peachtree St., N. E., Atlanta
 Schenck, H. C., Ga. Dept. of Public Health, Atlanta
 Schneider, J. F., First Natl. Bank Bldg., Atlanta
 Schroder, J. Spalding, Emory University Hospital, Emory University
 Schroeder, Paul L., 490 Peachtree St., N. E., Atlanta
 Scott, Wilbur M., Grady Mem. Hospital, Atlanta (Asso.)
 Sealey, R. M., Medical Arts Bldg., Atlanta
 Sellers, T. F., Ga. Dept. of Public Health, Atlanta
 Selman, W. A., 157 Forrest Ave., N. E., Atlanta
 Semans, James H., 34 Seventh St., N. E., Atlanta
 Shackelford, B. L., Medical Arts Bldg., Atlanta
 Shanks, Edgar D., 478 Peachtree St., N. E., Atlanta
 Shea, Patrick C., Jr., Grady Mem. Hospital, Atlanta (Asso.)
 Sheldon, Walter H., Grady Mem. Hospital, Atlanta
 Shepard, V. Duncan, 663 W. Peachtree St., N. E., Atlanta
 Simpson, James R., 490 Peachtree St., N. E., Atlanta
 Sims, Marshall R., 157 Forrest Ave., N. E., Atlanta
 Sinkoe, S. J., Candler Bldg., Atlanta
 Skiles, W. Vernon, Jr., 56 Fifth St., N. E., Atlanta
 Skobba, J. S., 490 Peachtree St., N. E., Atlanta
 Slade, Helen Benedict, 409 Collier Rd., N. W., Atlanta (Asso.)
 Slade, John deR., 763 Juniper St., N. E., Atlanta
 Sloan, W. P., Candler Bldg., Atlanta
 Sloan, W. P., Jr., Candler Bldg., Atlanta
 Smith, Carter, Medical Arts Bldg., Atlanta
 Smith, Charles W., 57 Sixth St., N. E., Atlanta
 Smith, Joel Perry, 26 Linden Ave., N. E., Atlanta
 Smith, Linton M., 427½ Moreland Ave., N. E., Atlanta
 Smith, M. F., 918 Bankhead Ave., N. W., Atlanta
 Smith, Randolph, 478 Peachtree St., N. E., Atlanta
 Smith, W. A., Medical Arts Bldg., Atlanta
 Spier, Eugene, Piedmont Hospital, Atlanta
 Stampa, Samuel, Candler Bldg., Atlanta
 Staton, T. R., 478 Peachtree St., N. E., Atlanta
 Steadman, Henry E., 3021 Stewart Ave., Hapeville
 Stelling, Henry G., 3076½ Roswell Rd., N. W., Atlanta
 Stephens, A. Leslie, Jr., 478 Peachtree St., N. E., Atlanta
 Stephenson, Robert H., 490 Peachtree St., N. E., Atlanta
 Stewart, Calvin B., 478 Peachtree St., N. E., Atlanta
 Stillerman, Hyman B., 26 Linden Ave., N. E., Atlanta
 Stoddard, S. D., Ga. Institute of Technology, Atlanta
 Stone, Chas. F., Jr., Medical Arts Bldg., Atlanta
 Stoneburner, Lawson W., Lawson VA Hospital, Chamblee (Asso.)
 Stoner, Cyrus H., Candler Bldg., Atlanta
 Strickland, Maurice A., 106 N. East Point St., East Point
 Strickler, C. W., 123 Forrest Ave., N. E., Atlanta
 Strickler, Cyrus W., Jr., 123 Forrest Ave., N. E., Atlanta
 Stubbs, George M., Grady Mem. Hospital, Atlanta (Asso.)
 Sturdevant, Clinton E., Healey Bldg., Atlanta
 Sunderman, F. W., U. S. Public Health Service, Atlanta (Asso.)
 Supan, Peter C., U. S. Naval Air Dispensary, Healey Bldg., Atlanta (Asso.)
 Swanson, Cosby, 478 Peachtree St., N. E., Atlanta
 Swanson, Homer S., Emory University Hospital, Emory University
 Tabb, William G., Jr., Medical Arts Bldg., Atlanta
 Tankesley, Robert M., 478 Peachtree St., N. E., Atlanta
 Tanner, James C., Jr., Crawford W. Long Mem. Hospital, Atlanta (Asso.)
 Taranto, Morris B., Mortgage Guarantee Bldg., Atlanta
 Tarplee, Scott L., 29 Twelfth St., N. E., Atlanta
 Taylor, W. J., 1677 Sylvan Rd., S. W., Atlanta
 Teate, Hentz L., Jr., 104 Ponce de Leon Ave., N. E., Atlanta
 Tepis, Paul, 826 Sherwood Rd., N. E., Atlanta (Asso.)
 Thehaut, Ben R., Candler Bldg., Atlanta
 Thomason, C. Griggs, 106 N. East Point St., East Point
 Thomason, W. L., 157 Forrest Ave., N. E., Atlanta
 Thompson, D. O., 478 Peachtree St., N. E., Atlanta
 Thompson, Edgar A., El Centro, Calif. (Asso.)
 Thompson, F. H., Crawford W. Long Mem. Hospital, Atlanta (Asso.)
 Thompson, John W., 27 Eighth St., N. E., Atlanta
 Thompson, Ralph M., VA Regional Office, Atlanta (Asso.)
 Thompson, Wm. R., 73 Eleventh St., N. E., Atlanta
 Thornton, Lawson, 478 Peachtree St., N. E., Atlanta
 Thoroughman, James C., 2888 Haversham Rd., N. W., Atlanta
 Tidmore, T. L., Piedmont Hospital, Atlanta
 Timberlake, G. B., Candler Bldg., Atlanta
 Timberlake, Lloyd F., 35 Fourth St., N. E., Atlanta
 Tootle, George S., Grady Mem. Hospital, Atlanta (Asso.)
 Treusch, Herbert L., 1745 Harvard St., N. W., Washington, D. C. (Hon.)
 Trimble, W. H., 478 Peachtree St., N. E., Atlanta
 Trinchler, Irvin H., Pinehurst, N. C.
 Tucker, Robert P., 100½ N. Main St., East Point
 Turk, L. N., Jr., Candler Bldg., Atlanta
 Turner, August B., Grady Mem. Hospital, Atlanta (Asso.)
 Turner, Edwin W., 100½ N. Main St., East Point
 Turner, John W., 151 Ponce de Leon Ave., N. E., Atlanta
 Turrentine, Paul E., 478 Peachtree St., N. E., Atlanta
 Upchurch, W. E., Healey Bldg., Atlanta
 Upshaw, C. B., 18 Fourth St., N. W., Atlanta
 Usher, Glen S., U. S. Public Health Service, Atlanta (Asso.)
 Van Buren, E., 768 Juniper St., N. E., Atlanta
 Van Dyke, A. H., Grant Bldg., Atlanta
 Varner, John B., 478 Peachtree St., N. E., Atlanta
 Veatch, Jesse W., Jr., 490 Peachtree St., N. E., Atlanta
 Velkoff, Abraham S., 490 Peachtree St., N. E., Atlanta
 Vella, Paul D., 1010 W. Peachtree St., N. E., Atlanta
 Vinson, C. D., 72 Anniston Ave., S. E., Atlanta
 Vinton, Luther M., 478 Peachtree St., N. E., Atlanta
 Visanska, Samuel A., 1021 St. Charles Ave., N. E., Atlanta (Hon.)
 Vonderlehr, R. A., 1409 Fairview Rd., N. E., Atlanta (Asso.)
 Wagar, Anne W., 1280 Peachtree St., N. E., Atlanta
 Wagnon, George N., Medical Arts Bldg., Atlanta
 Walker, Exum, 490 Peachtree St., N. E., Atlanta

Walker, J. Frank, Lawson VA Hospital, Chamblee (Asso.)
 Walker, John R., 922 W. Peachtree St., N. E., Atlanta
 Wall, Hilton F., 21 Eighth St., N. E., Atlanta
 Walton, John M., 418 Capitol Ave., S. E., Atlanta
 Ward, Emmett, Medical Arts Bldg., Atlanta
 Ward, Wm., Cleveland, 36 Butler St., S. E., Atlanta
 Warner, W. P., Jr., 478 Peachtree St., N. E., Atlanta
 Warnock, C. Murray, 478 Peachtree St., N. E., Atlanta
 Warren, James V., Emory University Hospital, Emory University (Asso.)
 Warren, Wm. C., Jr., 478 Peachtree St., N. E., Atlanta
 Waters, Wm. C., Jr., 663 W. Peachtree St., N. E., Atlanta
 Watters, Julian Q., Medical Arts Bldg., Atlanta
 Weaver, J. C., 78 Ellis St., N. E., Atlanta (Hon.)
 Weens, H. S., Grady Mem. Hospital, Atlanta
 Weinberg, James I., 490 Peachtree St., N. E., Atlanta
 Weinberg, S. P., 704 Piedmont Ave., N. E., Atlanta
 Weinstein, A. A., 663 W. Peachtree St., N. E., Atlanta
 Weitz, Frank, 780 Juniper St., N. E., Atlanta
 West, C. M., Candler Bldg., Atlanta
 West, Edward M., Crawford W. Long Mem. Hospital, Atlanta (Asso.)
 Whipple, Robert L., Jr., Medical Arts Bldg., Atlanta
 Whitaker, William G., Jr., 490 Peachtree St., N. E., Atlanta
 White, James R., 478 Peachtree St., N. E., Atlanta
 Whorton, Carl W., Grady Mem. Hospital, Atlanta (Asso.)
 Wilker, Irving, Ft. McPherson, Lee St., S. W., Atlanta (Asso.)
 Wilkins, S. A., Jr., Emory University Hospital, Emory University
 Williams, George A., Medical Arts Bldg., Atlanta
 Williams, Thomas H., Grady Mem. Hospital, Atlanta (Asso.)
 Willingham, T. I., 56 Fifth St., N. E., Atlanta
 Willis, Augusta Elizabeth, Lawson VA Hospital, Chamblee (Asso.)
 Wilmer, John Grant, Medical Arts Bldg., Atlanta
 Wilson, Joseph S., Grady Mem. Hospital, Atlanta (Asso.)
 Wilson, Richard B., 490 Peachtree St., N. E., Atlanta
 Winstead, George A., Grady Mem. Hospital, Atlanta (Asso.)
 Woddial, Joseph D., Grand Theatre Bldg., Atlanta
 Wolff, Bernard P., Medical Arts Bldg., Atlanta

Wood, R. Hugh, Emory University School of Medicine, Atlanta
 Woolley, Lawrence F., 490 Peachtree St., N. E., Atlanta
 Worth, Jack J., Jr., 478 Peachtree St., N. E., Atlanta
 Wright, E. S., Medical Arts Bldg., Atlanta
 Yampolsky, Joseph, 478 Peachtree St., N. E., Atlanta
 Yarn, Charles P., Lawson VA Hospital, Chamblee (Asso.)
 York, Jesse H., Medical Arts Bldg., Atlanta

GLYNN COUNTY

Officers

President Willis, T. V.
 Vice-President Moore, H. L.
 Secretary-Treasurer Johnston, T. H.
 Delegate Collier, Thomas W.
 Alternate Delegate McDaniel, S. P.
 Censors: Kirchman, Herbert; Towson, Ira G.; and Valente, Louis A.

Members

Avera, J. B., Brunswick
 Brawner, L. E., St. Simons Island
 Burford, Robert S., Brunswick
 Coe, H. M., Brunswick
 Collier, Thomas W., Brunswick
 Greer, C. B., Brunswick
 Harris, B. W., Memphis, Tenn.
 Hicks, James M., Brunswick
 Johnston, Thomas H., Brunswick
 Kirchman, Herbert, Brunswick
 McDaniel, S. P., Brunswick
 Mitchell, Frank B., Jr., Brunswick
 Moore, Haywood L., Brunswick
 Muse, Jesse Phillip, Brunswick
 Robben, Francis J., Brunswick
 Simmons, James O., Woodbine
 Simmons, J. W., Brunswick
 Towson, Ira G., Sea Island
 Valente, Louis Anthony, Darien
 Willis, Tom Vann, Brunswick
 Wilson, C. A., Jr., Brunswick
 Winchester, M. E., Brunswick

GORDON COUNTY

Officers

President Billings, J. E.
 Vice-President Walter, R. D.
 Secretary-Treasurer Lang, Lewis R.
 Delegate Hall, W. D.
 Alternate Delegate Billings, J. E.

Members

Acree, M. A., Calhoun
 Banks, George T., Fairmount (Hon.)
 Barnett, W. R., Calhoun (Hon.)
 Billings, J. E., Calhoun
 Hall, W. D., Calhoun
 Lang, Lewis R., Calhoun
 Richards, Charles K., Calhoun
 Steele, Byron Harold, Fairmount
 Walter, R. D., Calhoun

GRADY COUNTY

Officers

President Reynolds, A. B.
 Secretary-Treasurer Rogers, J. V.
 Delegate Rogers, J. V.

Members

Arline, T. J., Cairo (Hon.)
 Beale, George L., 14800 Bay Shore Drive, Maderia Beach, St. Petersburg, Fla.

Hancock, Sidney Lanier, Cairo
 Rehberg, A. W., Cairo
 Reynolds, A. B., Cairo
 Reynolds, H. M., Cairo
 Rogers, J. V., Cairo
 Rogers, J. V., Jr., Grady Mem. Hospital, Atlanta
 Walker, W. A., Cairo (Hon.)
 Warnell, J. B., Cairo

GREENE COUNTY

Officer

President Killam, F. H.

Members

Etheridge, Wm. N., Greensboro
 Killam, F. H., Greensboro
 McGuire, Thomas Howard, Houston, Texas

GWINNETT COUNTY

Officers

President Chastain, J. R.
 Vice-President Hutchins, W. J.
 Sec. Treas. Smith, Reuben E.
 Delegate Puett, W. W.
 Alternate Delegate Mason, M. H.

Members

Chastain, Jos. Robert, Buford
 Ezzard, W. P., Lawrenceville
 Cain, Sylvester, Jr., Norcross
 Hinton, Samuel Herbert, Lawrenceville
 Hutchins, Harry, Buford
 Hutchins, W. J., Buford
 Kelley, D. C., Lawrenceville
 Mason, Miles Herbert, Duluth
 Puett, W. W., Norcross
 Sims, Fayette Alfred, Jr., Lawrenceville
 Smith, Reuben E., Buford
 Williams, Andrew D., Lawrenceville

HABERSHAM COUNTY

Officers

President Garrison, D. H.
 Vice-President Hardman, C. T.
 Sec. Treas. Nicholson, George T.
 Delegate Walker, J. L.
 Alt. Delegate Nicholson, George T.
 Censors: Arrendale, Joe J.; and Roberts, B. J.

Members

Arrendale, Joe J., Cornelia
 Barrett, Clara, Ga. Dept. of Public Health, Atlanta
 Brabson, T. H., Cornelia
 Garrison, D. H., Clarksville
 Hardman, C. T., Tallulah Falls
 Nicholson, George T., Cornelia
 Roberts, B. J., Cornelia
 Tolhurst, George Monroe, Cleveland
 Walker, J. L., Clarksville

HALL COUNTY

Officers

President Hardman, Billy S.
 Vice-Pres. Nalley, Wm. Benjamin
 Sec. Treas. Whitworth, C. W.
 Delegate Hardman, Billy S.
 Alt. Delegate McCrum, Barton A.
 Censors: Sirmons, Derrell C.; Garner, W. Raleigh, and Whitworth, C. W.

Members

Burns, J. K., Jr., Gainesville
 Burns, John Knox, III, Gainesville
 Butler, C. G., Gainesville
 Cheek, Pratt, Gainesville
 Chandler, B. B., Gainesville
 Davis, Bradley B., Gainesville
 Garner, W. Raleigh, Gainesville
 Gilbert, Ben P., Gainesville
 Grove, E. W., Gainesville
 Hardman, Billy S., Gainesville
 Howard, Marcus L., Dahlonga
 Hulsey, John M., Jr., New Holland
 Joiner, Hartwell, Gainesville
 Lancaster, H. H., New Holland
 McCarver, W. C., Jr., Gainesville
 McCrum, Barton A., Gainesville
 Meeks, Jesse L., Gainesville
 Nalley, William Benjamin, Helen
 Neal, L. G., Cleveland
 Neal, L. G., Jr., Cleveland
 Rogers, R. L., Gainesville
 Simons, Derrell C., Dahlonga
 Smith, J. Gregg, Gainesville
 Titshaw, H. S., Gainesville
 Valentine, Herbert Edward, Jr.,
 Gainesville
 Ward, Eugene L., Gainesville
 Wheelchel, C. D., Gainesville
 Whitworth, C. W., Gainesville

HANCOCK COUNTY**Officers**

President..... Darden, Horace
 Vice-President..... Jernigan, C. S.
 Secretary-Treasurer..... Earl, H. L.
 Delegate..... Jernigan, C. S.

Members

Darden, Horace, Sparta (Hon.)
 (deceased)
 Earl, H. L., Sparta
 Elam, Lincoln Patrick, Sparta
 Hutchings, Ernest H., Sparta
 Jernigan, C. S., Sparta

HART COUNTY**Officers**

President..... Harper, George T.
 Sec.-Treas..... Cacchioli, Louis G.
 Delegate..... Milford, J. Hubert

Members

Cacchioli, Louis, G., Hartwell
 Harper, G. T., Dewy Rose
 McCurry, W. E., Hartwell (Hon.)
 Milford, J. Hubert, Hartwell

HENRY COUNTY**Officers**

President..... Brandon, R. V.
 Vice-President..... Foster, G. R., Jr.
 Secretary-Treasurer..... Ellis, H. C.

Members

Brandon, R. V., McDonough
 Ellis, H. C., McDonough (Hon.)
 Foster, Gordon R., Jr., McDonough

HOUSTON-PEACH COUNTIES**Officers**

Sec.-Treas..... Hendrick, A. G.
 Delegate..... Marshall, A. Smoak
 Alt. Delegate..... Hendrick, A. G.

Members

Hendrick, A. G., Perry
 Marshall, A. Smoak, Fort Valley

**JACKSON-BARROW
COUNTIES****Officers**

President..... Rogers, A. A., Jr.
 Vice-President..... Randolph, W. Q.
 Sec.-Treas..... Etheridge, Edwin H.
 Delegate..... Russell, Alex B.
 Alt. Delegate..... Rogers, A. A., Jr.

Members

Allen, M. B., Hoschton
 Bowdoin, W. H., Statham
 Etheridge, Edwin Holt, Winder
 Harris, E. R., Winder
 Lord, C. B., Jefferson
 McDonald, E. M., Winder
 Pittman, O. C., Commerce
 Randolph, W. Q., Winder
 Randolph, W. T., Winder
 Rogers, A. A., Commerce
 Rogers, A. A., Jr., Commerce
 Russell, Alex B., Winder
 Scoggins, P. T., Commerce
 Stovall, J. T., Jefferson

JASPER COUNTY**Officers**

President..... Belcher, F. S.
 Vice-President..... Fisher, Albert, Jr.
 Sec.-Treas..... Lancaster, E. M.
 Delegate..... Belcher, F. S.

Members

Belcher, F. S., Monticello
 Fisher, Albert, Jr., Monticello
 Lancaster, E. M., Shady Dale

JEFFERSON COUNTY**Officers**

President..... Revell, Walter J.
 Vice-President..... Williams, C. Roy
 Sec.-Treas..... Pilcher, James W.
 Delegate..... Williams, C. Roy
 Alternate Delegate..... Lewis, John R.

Members

Bryant, V. L., Wadley
 Lewis, J. R., Louisville
 Pilcher, John J., Wrens
 Pilcher, James W., Louisville
 Revell, Walter J., Louisville
 Williams, C. Roy, Wadley

JENKINS COUNTY**Officers**

Sec.-Treas..... Thompson, Cleveland
 Delegate..... Lee, H. G.
 Alt. Delegate..... Simmons, Wm. G.

Members

Hawkins, Katrine Rawls, Sylvania
 Lee, H. G., Millen
 Mulkey, A. P., Millen
 Mulkey, Q. A., Millen
 Simmons, William G., Sylvania
 Thompson, Cleveland, Waynesboro

LAMAR COUNTY**Officers**

President..... Jackson, J. H.
 Vice-President..... Pritchett, D. W.
 Sec.-Treas..... Traylor, S. B.
 Delegate..... Corry, J. A.

Members

Corry, J. A., Barnesville
 Crawford, John B., Barnesville
 Jackson, J. H., Barnesville
 Pritchett, D. W., Barnesville
 Traylor, S. B., Barnesville

LAURENS COUNTY**Officers**

President..... Fernan-Nunez, M.
 Vice-President..... Hodges, Chas. A.
 Secretary-Treasurer..... Cheek, O. H.
 Delegate..... Cobb, Tyrus R., Jr.
 Alt. Delegate..... Hodges, Chas. A.
 Censors: Coleman, A. T.; Moye,
 G. C.; Barton, J. J.; and Dodd,
 Wm. A.

Members

Barton, J. J., Dublin (Hon.)
 Bell, John A., Jr., Dublin
 Bloise, Francis L., VA Hospital,
 Dublin (Asso.)
 Brandes, Peter, VA Hospital, Dublin
 (Asso.)
 Brantley, J. G., Wrightsville
 Bush, James L., Dublin
 Carter, J. G., Scott
 Cheek, O. H., Dublin
 Cheney, Fred D., VA Hospital, Dub-
 lin (Asso.)
 Claxton, E. B., Dublin
 Cobb, Tyrus R., Jr., Dublin
 Coleman, A. T., Dublin
 Coleman, Fred J., Dublin
 Coyle, Joseph A., VA Hospital,
 Dublin (Asso.)
 Cullen, Milton L., VA Hospital,
 Dublin (Asso.)
 Dodd, William Asa, Wrightsville
 Fernan-Nunez, M., Dublin
 Hodges, C. A., Dublin
 Karpas, Robert, VA Hospital, Dub-
 lin (Asso.)
 Lanier, L. I., Soperton
 Moye, C. G., Brewton
 Mullins, Glenn, VA Hospital, Dub-
 lin (Asso.)
 Quinn, David E., VA Hospital, Dub-
 lin (Asso.)
 Singer, S. B., VA Hospital, Dublin
 (Asso.)
 Stapleton, James W., VA Hospital,
 Dublin (Asso.)
 Ware, A. D., Toombsboro

MACON COUNTY**Officer**

Sec.-Treas..... Adams, Thos. M.

Members

Adams, J. Fred, Montezuma
 Adams, Thos. M., Montezuma
 Derrick, H. C., Oglethorpe
 Frederick, D. B., Marshallville
 (Hon.)

McDUFFIE COUNTY**Member**

Riley, B. F., Jr., Thomson

MERIWETHER-HARRIS**COUNTIES****Officers**

President..... Jackson, H. C.
 Vice-President..... Raper, Stuart
 Secretary-Treasurer..... Gilbert, R. B.
 Delegate..... Irwin, C. E.
 Alternate Delegate..... Raper, Stuart

Members

Allen, W. P., Woodbury
 Bennett, Robert L., Warm Springs
 Bennett, V. H., Gay
 Ellis, W. P., Chipley
 Gilbert, R. B., Greenville
 Irwin, C. E., Warm Springs

Jackson, Henry Calvin, Manchester
 Jackson, T. W., Manchester (Hon.)
 Johnson, J. A., Manchester
 Johnson, James A., Jr., Manchester
 Kirkland, W. P., Manchester
 Raper, Stuart, Warm Springs

MITCHELL COUNTY

Officers

President Howard, C. L.
 Vice-President Stevenson, C. A.
 Secretary-Treasurer Belcher, D. P.
 Delegate Brim, J. C.
 Alternate Delegate William, M. W.

Members

Belcher, D. P., Pelham
 Brim, J. C., Pelham
 Grovatt, J. G., Camilla
 Howard, C. L., Pelham
 McNeill, A. A., Jr., Camilla
 Pirkle, James C., Pelham
 Roles, C. L., Camilla
 Stevenson, C. A., Camilla
 Walker, Edwin Mercer, Pelham
 Williams, M. W., Camilla

MONROE COUNTY

Officers

President Alexander, George H.
 V.-Pres. Bramblett, A. Walter, Jr.
 Sec.-Treas. Lane, George M.
 Delegate Alexander, George H.

Members

Alexander, George H., Forsyth
 Bramblett, A. Walter, Jr., Forsyth
 Goolsby, R. C., Sr., Forsyth (Hon.)
 Hodges, Thomas Lumpkin, Jr., U.
 S. Naval Hospital, Oakland, Calif.
 Lane, George Mitchell, Thomson

MONTGOMERY COUNTY

Officers

President Moses, W. M.
 Vice-President Hunt, J. E.
 Secretary-Treasurer Palmer, J. W.
 Delegate Kusnitz, Morris, Jr.

Members

Moses, W. M., Uvalda
 Palmer, J. W., Ailey
 Hunt, J. E., Box 143, Bynum, Ala.
 Kusnitz, Morris, Jr., Alamo

MORGAN COUNTY

Officers

President Nicholson, J. H.
 Secretary-Treasurer McGeary, W. C.
 Delegate McGeary, W. C.
 Alt. Delegate Nicholson, J. H.

Members

Dickens, C. H., Madison
 McGeary, W. C., Madison
 Nicholson, J. H., Madison
 Porter, J. L., Rutledge (Hon.)
 White, Edward Olin, Madison

MUSCOGEE COUNTY

Officers

President Wolff, Luther H.
 Vice-President Love, William G.
 Sec.-Treas. Hughston, Jack C.
 Delegate Hutto, George M.
 Delegate Love, William G.
 Alternate Delegate Storey, W. E.
 Alternate Delegate Murray, G. S.
 Censors: Berman, Dave; Boyter,

Henry H., and Schuessler, George

Members

Beach, Bessie Mae, Martin Bldg.,
 Columbus
 Berman, Dave, Doctors Bldg., Colum-
 bus
 Berry, Arthur N., Medical Arts
 Bldg., Columbus
 Bickerstaff, H. J., Medical Arts
 Bldg., Columbus
 Blanchard, Mercer, 204 Eleventh
 St., Columbus
 Blanchard, Mercer Carl, 204 Elev-
 enth St., Columbus
 Boyter, Henry H., 204 Eleventh St.,
 Columbus
 Brannen, O. C., Murrah Bldg., Co-
 lumbus
 Bush, John, 1340 Fourth Ave.,
 Columbus
 Butler, Clarence C., Medical Arts
 Bldg., Columbus
 Cain, Elisha J., Medical Arts Bldg.,
 Columbus
 Carter, Curtis B., 1545 Third Ave.,
 Columbus (Hon.)
 Chipman, R. A., Swift Bldg., Co-
 lumbus
 Comstock, George W., U. S. Public
 Health Service, Columbus
 Conner, George R., 1229 Second
 Ave., Columbus
 Cook, Wm. C., Swift Bldg., Colum-
 bus
 Cooke, W. L., Doctors Bldg., Colum-
 bus (Hon.)
 Cosby, F. L., Doctors Bldg., Colum-
 bus
 Curtiss, Edgar J., Doctors Bldg.,
 Columbus (Hon.)
 Dillard, Guy J., Medical Arts Bldg.,
 Columbus
 Durden, John G., Jr., 1327 Third
 Ave., Columbus
 Dykes, A. N., 1229 Second Ave.,
 Columbus
 Edwards, Franklin D., 1344 Second
 Ave., Columbus
 Elder, Ivan R., 1229 Second Ave.,
 Columbus
 Elkins, James A., 1327 Third Ave.,
 Columbus
 Fletcher, H. Quigg, Jr., 1327 Third
 Ave., Columbus
 Fox, Brent, Medical Arts Bldg.,
 Columbus
 Freeman, Edward R., 1340 Fourth
 Ave., Columbus (deceased)
 Gibbons, R. L., Murrah Bldg., Colum-
 bus
 Gilliam, O. D., Doctors Bldg.,
 Columbus
 Graffagnino, Peter C., Medical Arts
 Bldg., Columbus
 Henderson, Charles W., Swift Bldg.,
 Columbus
 Hughston, Jack C., Medical Arts
 Bldg., Columbus
 Hutto, George M., Medical Arts
 Bldg., Columbus
 Jenkins, W. F., 1444 Fourth Ave.,
 Columbus
 Jones, Wm. R., Doctors Bldg.,
 Columbus
 Jordan, W. P., 1119 Fourth Ave.,
 Columbus
 Jordan, W. P., Jr., 1119 Fourth Ave.,
 Columbus

Land, Polk S., Doctors Bldg., Colum-
 bus
 Love, William G., Medical Arts
 Bldg., Columbus
 Mayher, J. W., 1344 Second Ave.,
 Columbus
 Mayher, Will E., 1344 Second Ave.,
 Columbus
 McDuffie, J. H., Jr., 1120 Third
 Ave., Columbus (deceased)
 McWhorter, M. R., 1338 Fourth
 Ave., Columbus
 Monaco, A. Ralph, City Hospital,
 Columbus
 Moses, Alice, 1413 Second Ave.,
 Columbus
 Munn, E. K., Murrah Bldg., Colum-
 bus
 Murray, G. S., Swift Bldg., Colum-
 bus
 Peebles, Wm. J., Linwood Clinic,
 Columbus
 Rhea, James W., Swift Bldg., Colum-
 bus
 Roberts, Luther J., Martin Bldg.,
 Columbus
 Schley, Frank B., 303 Eleventh St.,
 Columbus
 Schuessler, George, 1437 Second
 Ave., Columbus
 Smith, Charles R., VA Hospital,
 Downey, Ill.
 Snelling, W. R., 1315 Fourth Ave.,
 Columbus
 Stapleton, J. L., 307 Eleventh St.,
 Columbus
 Stewart, John S., Medical Arts
 Bldg., Columbus
 Storey, W. E., 1312 Third Ave.,
 Columbus
 Thompson, John B., Medical Arts
 Bldg., Columbus
 Thrash, J. A., City Hospital, Colum-
 bus
 Theatte, Bruce, 204 Eleventh St.,
 Columbus
 Tillery, Bert, Medical Arts Bldg.,
 Columbus
 Turner, Henry H., Martin Bldg.,
 Columbus
 Venable, D. R., 1722 Stark Ave.,
 Columbus
 Walker, John E., 1223 Third Ave.,
 Columbus
 Waller, Roy M., Jr., Murrah Bldg.,
 Columbus
 Willis, J. N., Swift Bldg., Colum-
 bus
 Winn, J. H., Swift Bldg., Columbus
 Wolff, Luther H., Medical Arts
 Bldg., Columbus
 Wooldridge, J. C., Murrah Bldg.,
 Columbus (Hon.)
 Youmans, J. R., Doctors Bldg.,
 Columbus (Hon.)

NEWTON COUNTY

Officers

President Huson, W. J.
 Sec.-Treas. Palmer, Clarence B.
 Delegate Sams, J. R.
 Alternate Delegate Huson, W. J.

Members

Huson, W. J., Covington
 Mitchell, J. B., Jr., Porterdale
 Nesbit, F. C., Covington

Palmer, Clarence B., Covington
Sams, J. R., Covington
Swann, W. K., Knoxville, Tenn.
Waites, S. L., Covington
Willson, Pleas, Newborn

OCMULGEE COUNTY (Bleckley-Dodge-Pulaski Counties)

Officers

President..... Baker, W. R.
Vice-President..... Smith, Richard L.
Sec.-Treas..... Thomson, James L.
Delegate..... Smith, Richard L.
Alt. Delegate..... Jones, Edward G.

Members

Arnold, M. F., Hawkinsville
Baker, W. R., Hawkinsville
Batts, A. S., Hawkinsville
Bush, Albert R., Hawkinsville
Harp, S. L., Cochran
Holder, F. P., Jr., Eastman
Jones, Edward G., Eastman
Long, H. W., Eastman
Massey, W. F., Chester
Smith, J. M., Cochran (Hon.)
Smith, Richard L., Cochran
Thomson, James L., Eastman
Whipple, R. L., Cochran

POLK COUNTY

Officer

President..... Griffith, J. E.
Vice-President..... Blanchard, W. H.
Secretary-Treasurer..... Lucas, W. H.
Delegate..... Lucas, W. H.
Alternate Delegate..... Griffith, J. E.

Members

Blanchard, W. H., Cedartown
Chapman, W. A., Cedartown (Hon.)
Chaudron, P. O., Cedartown
Elliott, Cecil B., Cedartown
Goldin, Harold W., Rockmart
Good, John W., Cedartown
Griffith, J. E., Rockmart
Hagan, James H., Rockmart
Lucas, W. H., Cedartown
McBryde, T. E., Rockmart
McGehee, John M., Cedartown
Spanjer, Raymond F., Cedartown
Styles, O. R., Cedartown
White, George M., Rockmart

RABUN COUNTY

Members

Dover, J. C., Clayton
Heaton, Samuel A., Jr., Clayton

RANDOLPH-TERRELL COUNTIES

Officers

President..... Daniel, Ernest F.
V-President..... Martin, Robert B., III
Secretary-Treasurer..... Elliott, W. G.
Delegate..... Martin, Robert B., III
Alt. Delegate..... Quattlebaum, R. B.
Censors: Tidmore, J. C.; Sims, A.
R., and Rogers, F. S.

Members

Arnold, J. T., Parrott
Daniel, Ernest F., Dawson
Elliott, W. G., Cuthbert
Goss, Woodrow, Ashburn

Harper, T. F., Coleman
Kenyon, J. M., Richland (Hon.)
Kenyon, S. P., Dawson
Martin, F. M., Shellman
Martin, Robert B., III, Cuthbert
Paschal J. Dean, Harvard Medical
School, Boston, Mass.
Patterson, J. C., Cuthbert
Quattlebaum, R. B., Fort Gaines
Rogers, F. S., Coleman
Sims, A. R., Richland
Tidmore, Joseph C., Dawson

RICHMOND COUNTY

Officers

President..... Mulherin, Charles McL.
President-Elect..... Goodwin, Thos. W.
Vice-President..... Thurmond, Allen G.
Sec.-Treas..... Klemann, Gilbert L.
Delegate..... McGahee, Robert C.
Delegate..... Thomas, David R., Jr.
Delegate..... Martin, John M.
Alternate Delegate..... Harrison, F. N.
Alternate Delegate..... Miller, John M.
Alternate Delegate..... Roule, J. Victor

Members

Agee, M. P., 753 Broad St., Augusta
Bailey, Thomas E., 315 Tenth St.,
Augusta
Bell, Jack E., 1242½ Greene St.,
Augusta
Bernard, G. T., 204 Thirteenth St.,
Augusta
Blanchard, George C., Sou. Finance
Bldg., Augusta
Bowen, J. B., 842 Greene St.,
Augusta
Boyd, Wm. S., 1020 Greene St.,
Augusta
Brittingham, John W., 1345 Greene
St., Augusta
Brown, Stephen W., Sou. Finance
Bldg., Augusta
Brown, Thomas P., Route 5, Thom-
asville
Bryans, C. I., 967 Meigs St., Augus-
ta (Hon.)
Burdashaw, James F., 2571 Mt.
Auburn Ave., Augusta (Hon.)
Chandler, J. L., Jr., University Hos-
pital, Augusta
Chaney, Ralph H., 1445 Harper St.,
Augusta
Chaney, Ralph H., Jr., La. State
Board of Health, Pineville, La.
Clary, Thomas L., Jr., 1345 Greene
St., Augusta
Cleckley, Hervey M., University
Hospital, Augusta
Corbitt, Melvis O., 1309 Holden St.,
Augusta
Cranston, W. J., 1345 Greene St.,
Augusta
Davis, Abe J., 1302 Wilson St.,
Augusta
Davis, David A., University Hospital,
Augusta
DeVaughn, N. M., 124 Seventh St.,
Augusta
Ellison, Robert G., 2321 King Way,
Augusta
Estes, Marion M., Medical College
of Georgia, Augusta
Everett, Theodore, University Hos-
pital, Augusta

Fuller, Wm. A., 1345 Greene St.,
Augusta
Goodwin, Thomas W., Sou. Finance
Bldg., Augusta
Gray, J. D., 842 Greene St., Augusta
Greenblatt, Robert B., Medical Col-
lege of Georgia, Augusta
Harper, Harry T., Marion Bldg.,
Augusta
Harrison, F. N., 2733 Milledgeville
Rd., Augusta
Henry, C. G., 842 Greene St.,
Augusta
Hensley, E. A., Gihson
Hock, Charles W., University Hos-
pital, Augusta
Holmes, L. P., Sou. Finance Bldg.,
Augusta
Hummel, John E., 1345 Greene St.,
Augusta
Johnson, E. M., Oliver Gen. Hos-
pital, Augusta
Johnson, Robert W., 1229 Greene
St., Augusta
Kelly, Alex R., Jr., Trudeau Sani-
torium, Saranac Lake, N. Y.
Kelly, Gordon M., University Hos-
pital, Augusta
Kilpatrick, Charles M., Sou. Finance
Bldg., Augusta
Klemann, Gilbert L., Sou. Finance
Bldg., Augusta
Leonard, Robert E., 1001 Greene
St., Augusta
Lewis, S. J., Sou. Finance Bldg.,
Augusta
Lokey, Julian L., University Hos-
pital, Augusta
Martin, John M., 407 Seventh St.,
Augusta
Martin, Walter D., 501 Greene St.,
Augusta
Massengale, Leonard R., 1211
Greene St., Augusta
Mathews, W. E., Sou. Finance Bldg.,
Augusta
McGahee, Robert C., 1345 Greene
St., Augusta
McGinty, Howard C., 19 Lakemont
Dr., Augusta
Mettler, Fred A., Columbia Univ.
College of Physicians and Sur-
geons, New York, N. Y.
Miller, John M., 842 Greene St.,
Augusta
Milligan, King W., 942 Greene St.,
Augusta
Mulherin, Charles McL., 1345
Greene St., Augusta
Mulherin, F. X., 1345 Greene St.,
Augusta
Mulherin, Philip A., 1211 Greene
St., Augusta
Norvell, J. T., 1240 Greene St.,
Augusta
Palmer, John R., Jr., 1020 Greene
St., Augusta
Perkins, H. R., Sou. Finance Bldg.,
Augusta
Persall, John T., Jr., Sou. Finance
Bldg., Augusta
Philpot, W. K., 1345 Greene St.,
Augusta
Pinson, Harry D., Sou. Finance
Bldg., Augusta

Price, W. T., Leonard Bldg., Augusta
 Pund, Edgar R., Medical College of Georgia, Augusta
 Rhodes, R. L., Sou. Finance Bldg., Augusta
 Risteen, W. A., University Hospital, Augusta
 Roule, J. Victor, Sou. Finance Bldg., Augusta
 Sanderson, E. S., Medical College of Georgia, Augusta
 Schmidt, Henry L., Medical College of Georgia, Augusta
 Shepard, Walter L., University Hospital, Augusta
 Tessier, Claude E., Masonic Bldg., Augusta
 Thigpen, Corbett H., University Hospital, Augusta
 Thomas, David R., Jr., Sou. Finance Bldg., Augusta
 Thurmond, Allen G., 623 Greene St., Augusta
 Thurmond, J. W., 623 Greene St., Augusta
 Timmons, C. C., 415 Milledge Rd., Augusta
 Wammock, Hoke, Medical College of Georgia, Augusta
 Ward, Charles D., 842 Greene St., Augusta (deceased)
 Watson, W. G., 623 Greene St., Augusta
 Weeks, J. L., Harlem (Hon.)
 Weeks, Richard B., Sou. Finance Bldg., Augusta
 White, William O., 1345 Greene St., Augusta
 Wilcox, Everard A., P. O. Box 615, Beaufort, S. C. (Hon.)
 Wilkes, W. A., University Hospital, Augusta
 Williams, David C., Jr., 1345 Greene St., Augusta
 Winter, Wallace E., Orange Mem. Hospital, Orlando, Fla.
 Wright, George W., 1345 Greene St., Augusta
 Wright, Peter B., 1345 Greene St., Augusta
 Yates, T. M., 1113 Fairview Drive, Columbia, S. C.

ROCKDALE COUNTY

Member

Griggs, H. E., Conyers

SOUTH GEORGIA MEDICAL SOCIETY

(Berrien-Clinch-Cook-Echols-Lanier and Lowndes Counties)

Officers

President..... Smith, J. R.
 Vice-President..... Mixson, Harry
 Secretary-Treasurer..... Parrott, Jesse
 Delegate..... Little, A. G., Jr.
 Alt. Delegate..... Clements, Fred N.
 Censor..... Peters, James S., Jr.

Members

Austin, G. J., Jr., Valdosta
 Burns, D. L., Valdosta
 Campbell, James L., Jr., Valdosta
 Clements, Fred N., Adel
 Clements, H. W., Adel
 Eldridge, F. G., Valdosta

Gibson, Ira Malcolm, Valdosta
 Giddens, I. S., Lakeland
 Hutchinson, L. R., Adel
 Johnson, A. M., Valdosta
 Little, Alex G., Jr., Valdosta
 McKey, Earle S., Jr., Valdosta
 Mixson, E. Harry, Valdosta
 Mixson, J. F., Valdosta
 Mixson, Joyce F., Jr., Valdosta
 Morrow, John Gordon, Jr., Hahira
 Oliphant, Jones R., Adel
 Owens, B. G., Valdosta
 Parrott, Jesse, Hahira
 Perry, Robert E., Jr., Valdosta
 Peters, James S., Jr., Nashville
 Quillian, E. P., Clyattville
 Robbins, Allen Isaac, Homerville
 Saunders, A. F., Valdosta
 Sherman, Henry T., Valdosta
 Smith, E. J., Hahira
 Smith, J. R., Hahira
 Smith, Tom H., Valdosta
 Stump, Robert L., Jr., Valdosta
 Thomas, F. H., Valdosta
 Thompson, E. F., Valdosta
 Turner, J. D., Nashville
 Turner, W. W., Nashville
 Waugh, William C., Nashville
 Williams, T. C., Valdosta

SPALDING COUNTY

Officers

President..... Stuckey, Ann
 Vice-President..... Floyd, T. J., Jr.
 Sec.-Treas..... Williams, Virgil B.
 Delegate..... Hunt, Kenneth S.
 Alternate Delegate..... Smaha, T. G.
 Censors: Walker, George L.; Giles, J. T., and Jones, Alex P.

Members

Austin, J. L., Griffin
 Brown, George W., Griffin
 Clouse, John E., Jr., Griffin
 Copeland, H. J., Griffin
 Copeland, H. W., Griffin (Hon.)
 English, R. E. L., Griffin (Hon.)
 Floyd, T. J., Jr., Griffin
 Forrer, D. A., Griffin (Hon.)
 Frye, Augustus H., Jr., Griffin
 Giles, J. T., Griffin
 Hammond, Robert L., Jackson
 Head, D. L., Zebulon
 Head, M. M., Zebulon
 Hicks, Wright Grant, Jackson
 Howard, I. B., Williamson (Hon.)
 Hunt, Kenneth S., Griffin
 Jones, Alex P., Griffin
 King, Harry Crawford, Griffin
 King, William R., Jr., Griffin
 Miles, W. C., Griffin (Hon.)
 Oshlag, Abraham M., Griffin
 Smaha, T. G., Griffin
 Stuckey, Ann, Griffin
 Walker, Geo. L., Griffin
 Williams, Virgil B., Griffin

STEPHENS COUNTY

Officers

President..... McNeely, H. H.
 Vice-President..... Henry, Charles M.
 Secretary-Treasurer..... C. L. Ayers
 Delegate..... Shiftlet, Robert E.
 Alt. Delegate..... Singer, Arthur G.
 Censors: Chaffin, E. F.; McNeely, H. H., and Henry, Charles M.

Members

Ayers, C. L., Toccoa
 Chaffin, E. F., Toccoa
 Edge, J. H., 356 Home Park Ave., N. E., Atlanta (Hon.)
 Good, Wm. H., Jr., Toccoa
 Heller, W. B., Lakemont (Hon.)
 Henry, Chas. M., Toccoa
 Isbell, J. E. D., Toccoa
 McNeely, H. H., Toccoa
 Schaefer, W. Bruce, Toccoa
 Shiftlet, Robert E., Toccoa
 Singer, Arthur G., Toccoa

SUMTER COUNTY

Officers

President..... Fenn, Henry R.
 Vice-President..... McMath, Wm. B.
 Sec.-Treas..... Durham, Bon M.
 Delegate..... Fenn, Henry R.
 Alternate Delegate..... McMath, Wm. B.
 Censors: Fenn, Henry R.; McMath, Wm. B., and Durham, Bon M.

Members

Boyette, L. S., Ellaville
 Cheves, Langdon C., Jr., Montezuma
 Collins, Robert A., Jr., Montezuma
 Durham, Bon M., Americus
 Enzor, R. H., Smithville (Hon.) (deceased)
 Fenn, Henry R., Americus
 Gatewood, T. Schley, Americus
 Logan, J. Colquitt, Plains
 McMath, Wm. Bates, Americus
 Pendergrass, R. C., Americus
 Primrose, A. C., Americus
 Robinson, John H., III, Americus
 Savage, C. P., Montezuma
 Seay, E. Faxton, Marshallville
 Smith, Herschel A., Americus
 Thomas, Russell B., Americus
 Wilson, Frank Adams, III, Leslie
 Wise, B. Thad, Americus
 Wood, Kenneth, Leslie

TATTNALL COUNTY

Officers

President..... Hughes, J. M.
 Vice-President..... Strickland, L. V.
 Sec.-Treas..... Pinkston, A. G., Jr.
 Delegate..... Pinkston, A. G., Jr.
 Censors: Pinkston, A. G., Jr.; Collins, J. C.; and Jelks, L. R.

Members

Collins, J. C., Collins
 Colson, A. C., Glennville
 Hughes, J. M., Glennville
 Jelks, L. R., Reidsville
 Pinkston, A. G., Jr., Glennville
 Strickland, L. V., Cobbtown

TAYLOR COUNTY

Officers

President..... Sams, F. H.
 Vice-President..... Montgomery, R. C., II
 Secretary-Treasurer..... Whatley, E. C.
 Delegate..... Montgomery, R. C.
 Censors: Beason, Lewis; and Montgomery, R. C.

Members

Beason, Lewis, Butler
 Montgomery, R. C., Butler
 Montgomery, Robert C., II, Butler
 Sams, F. H., Reynolds
 Whatley, Edwards C., Reynolds

TELFAIR COUNTY**Officers**

President.....Mann, F. R., Jr.
 Vice-President.....Smith, F. A., Jr.
 Secretary-Treasurer Mann, F. R., Sr.
 Delegate.....Parkerson, S. T.
 Alternate Delegate.....Maloy, C. J.
 Censors: Mann, F. R., Sr.; Born,
 W. H., and Maloy, C. J.

Members

Born, W. H., McRae
 Jones, A. J., Jacksonville (Hon.)
 Maloy, C. J., McRae
 Maloy, D. W. F., Milan (Hon.)
 Mann, F. R., McRae
 Mann, F. R., Jr., McRae
 McMillan, Thos. J., Milan
 Parkerson, S. T., McRae
 Smith, F. A., Jr., McRae

THOMAS COUNTY**Officers**

President.....Pepin, Henry S., Jr.
 Vice-President.....Baldwin, Marion A.
 Secretary-Treasurer.....Shepard, Kirk
 Delegate.....Bell, Rudolph
 Alternate Delegate.....Mobley, John W.
 Censors: Watt, Charles H.; Moore,
 Henry M.; and Mobley, John W.

Members

Baldwin, Marion A., Thomasville
 Bell, Rudolph, Thomasville
 Bellhouse, Helen W., 12 Captiol
 Sq., S. W., Atlanta
 Cheshire, Howard L., Thomasville
 Collins, J. J., Thomasville
 Daniel, Frank C., Pavo
 Dillinger, Geo. R., Thomasville
 Erickson, Mary J., Thomasville
 Foushee, John Caldwell, Thomas-
 ville
 Friddell, William F., Boston (Hon.)
 Futch, T. Allen, Jr., Thomasville
 Garrett, J. A., Meigs
 Hill, Arthur W., 374 Ordnance Bat-
 talion, Camp McCoy, Wis.
 Isler, J. N., Meigs (Hon.)
 Jones, Henry, Coolidge (Hon.)
 King, J. T., Thomasville
 Levy, Tracy, USPH Outpatient
 Clinic, 4th and D St., S. W.,
 Washington, D. C.
 Little, Frank A., Thomasville
 Lundy, L. L., Boston
 McCollum, William, Thomasville
 Mobley, J. W., Jr., Thomasville
 Moore, H. M., Thomasville
 Morton, John Buck, Thomasville
 Murphy, Fred E., Jr., Thomasville
 Palmer, J. L., Thomasville
 Pepin, Henry S., Jr., Thomasville
 Reading, Herbert F., Thomasville
 Reid, James W., Thomasville
 Sanchez, S. E., Jr., Barwick
 Saye, E. B., Thomasville
 Shepard, Kirk, Thomasville
 Stillwell, John D., Thomasville
 Stinson, Roy F., Thomasville
 Wahl, Ernest F., Thomasville
 Wall, C. K., Thomasville
 Wasden, Howell A., Jr., Pavo
 Watt, C. H., Thomasville
 Wine, Mervin B., Thomasville

TIFT COUNTY**Officers**

President.....Winston, Richard K.
 Vice-President.....Jones, Robert E.
 Sec.-Treas.....Edmonson, Tom L.
 Delegate.....Flowers, Eugene M.

Members

Andrews, Agnew, Tifton
 Andrews, Ella F., Tifton
 Edmondson, Tom L., Tifton
 Evans, E. L., Tifton
 Flowers, Eugene M., Tifton
 Harrell, D. B., Tifton
 Jones, Robert E., Tifton
 Lucas, Paul W., Tifton
 Pittman, Carl S., Tifton
 Pittman, C. S., Jr., Tifton
 Webb, M. L., Tifton
 Winston, Richard K., Tifton
 Zimmerman, Charles E., Tifton
 Zimmerman, W. F., Tifton

TOOMBS COUNTY**Officers**

President.....Mercer, J. E.
 Sec.-Treas.....DeJarnette, R. H.
 Delegate.....Youmans, H. D.
 Alt. Delegate.....McArthur, J. D.

Members

Aiken, W. W., Lyons
 Bedingfield, W. H., Vidalia
 Conner, Herbert L., Vidalia
 Darby, V. Lee, Vidalia
 DeJarnette, R. H., Vidalia
 Findley, C. W., Vidalia
 Gross, O. S., Vidalia
 McArthur, J. D., Lyons
 Mercer, J. E., Vidalia
 Youmans, H. D., Lyons

**TRI-COUNTY
(Calhoun-Early-Miller
Counties)****Officers**

President.....Baxley, W. C.
 Vice-President.....Crowdis, Jas. H., Jr.
 Sec.-Treas.....Merritt, H. J.
 Delegate.....Standifer, J. G.
 Alternate Delegate.....Sharp, C. K.
 Censors: Martin, James B.; Martin,
 James W., Jr., and Wall, W. H.

Members

Baxley, W. C., Blakely
 Beard, J. S., Edison
 Bridges, R. R., Leary
 Crowdis, James H., Jr., Blakely
 Hattaway, J. C., Edison
 Hays, W. C., Colquitt
 Holland, S. P., Blakely
 Houston, W. H., Colquitt
 Martin, James B., Edison
 Merritt, Hinton J., Colquitt
 Merritt, James W., Jr., Colquitt
 Rentz, Turner W., Colquitt
 Sharp, C. K., Arlington
 Shepard, J. L., Damascus
 Shepard, W. O., Bluffton
 Standifer, J. G., Blakely
 Wall, W. H., Blakely

**TRI-COUNTY
(Liberty-Long-McIntosh
Counties)****Members**

Armistead, I. G., Townsend
 Middleton, O. D., Ludowici

TROUP COUNTY**Officers**

President.....Freeman, Thos. N., Jr.
 Vice-President.....Molyneaux, Evan W.
 Secretary-Treasurer.....Foster, H. A.
 Delegate.....Whitehead, C. Mark
 Alt. Delegate.....Molyneaux, Evan W.
 Censors: Molyneaux, Evan W.;
 Freeman, Thos. N., Jr., and Foster,
 H. A.

Members

Arnold, E. T., Jr., Hogansville
 Avery, R. M., LaGrange
 Calhoun, Samuel J., Langdale, Ala.
 Callaway, Enoch, LaGrange
 Caswell, Doyle F., Franklin
 Chambers, James W., LaGrange
 Clark, W. H., LaGrange
 Cowart, Charles Thornton, La-
 Grange
 Easley, Curran S., Jr., LaGrange
 Fackler, William B., Jr., LaGrange
 Foster, H. A., LaGrange
 Freeman, Thos. N., Jr., LaGrange
 Grace, Kenneth D., LaGrange
 Grady, Henry W., LaGrange
 Hadaway, W. H., LaGrange
 Hammett, H. H., LaGrange
 Hammett, H. H., Jr., LaGrange
 Hand, Benjamin H., LaGrange
 Harvey, C. W., Hogansville
 Hendricks, Willis M., LaGrange
 Herault, Pierre C., Jr., LaGrange
 Herman, E. C., LaGrange
 Holder, J. S., LaGrange
 Hutchinson, Wm. Lane, LaGrange
 Jones, H. T., West Point
 Lewis, James Willard, LaGrange
 Little, William F., Jr., West Point
 McCall, W. R., LaGrange
 McCulloh, Hugh, Jr., West Point
 Molyneaux, Evan W., Hogansville
 Morgan, D. E., LaGrange
 Morgan, J. C., West Point
 Morgan, J. C., Jr., West Point
 Muldoon, Edward J., West Point
 Norman, Lewis G., Jr., West Point
 O'Neal, R. S., LaGrange
 Phillips, W. P., LaGrange
 Prescott, Eustace H., LaGrange
 Taylor, John L., Franklin
 Whitehead, C. Mark, LaGrange
 Williams, C. O., West Point

TURNER COUNTY**Member**

Baxter, J. H., Ashburn (Hon.)

UPSON COUNTY**Officers**

President.....Carter, Robert L.
 Vice-President.....Head, Douglas L., Jr.
 Sec.-Treasurer.....Tyler, Herbert D.
 Delegate.....Garner, John E.
 Alt. Delegate.....Tyler, Herbert D.

Members

Adams, B. C., Thomaston (deceased)
 Barron, H. A., Thomaston (Hon.)
 Blackburn, Jno. D., Thomaston
 Bridges, B. L., Thomaston
 Carter, Robert L., Thomaston
 Dallas, R. E., Thomaston
 Garner, John E., Thomaston
 Girardeau, Ivylyn, Thomaston
 Gower, Wm. J., Jr., Thomaston
 Grubbs, J. H., Molena
 Harris, C. A., The Rock
 Head, Douglas L., Jr., Thomaston

Kellum, J. M., Thomaston
McKenzie, J. M., Thomaston
Sappington, T. A., Thomaston
Tyler, Herbert D., Thomaston
Woodall, Frank M., Thomaston
Woodall, James A., Thomaston
Woodall, Wm. Pruitt, Thomaston

WALKER-CATOOSA-DADE COUNTIES

Officers

President.....Derrick, Howard C., Jr.
Vice-President.....Hoover, John P.
Sec.-Treas.....Alexander, L. LeBron
Delegate.....Simonton, Fred H.
Alt. Delegate.....O'Connor, Frank L.
Censors: Simonton, Fred H.; Kitch-
ens, S. B., and O'Connor, Frank
L.

Members

Alexander, L. LeBron, Rossville
Cochran, T. A., Ringgold
Cornett, Dennis M., LaFayette
Derrick, Howard C., Jr., LaFayette
Hoover, John P., Rossville
Kitchens, S. B., LaFayette
Middleton, D. S., Rising Fawn
(Hon.)
O'Connor, Frank L., Rossville
Pope, Roy, Jr., Chickamauga
Shepard, Richard C., LaFayette
Shields, H. F., Chickamauga
Simonton, Fred H., Chickamauga
Stephenson, Chas. W., Ringgold
Vassey, G. C., Rossville

WALTON COUNTY

Officers

President.....Anderson, M. W.
Vice-President.....Huie, Lynn M.
Sec.-Treas.....Nunnally, Harry B.
Delegate.....Floyd, Chas. S.
Alt. Delegate.....DeFreese, Samuel J.

Members

Anderson, M. W., Social Circle
DeFreese, Samuel J., Monroe
Floyd, Chas. S., Logansville
Gerdine, John, Jersey (deceased)
Head, Homer, Monroe
Huie, Lynn M., Monroe
Nunnally, Harry B., Monroe
Stewart, Philip R., Monroe
Thompson, Ernest, Monroe

WARE COUNTY

Officers

President.....Hendry, W. A.
Vice-President.....Calhoun, W. C.
Sec.-Treas.....Smith, Leo
Delegate.....Pomeroy, W. L.
Alternate Delegate.....Smith, Leo
Censors: Seaman, H. A.; Hendry,
W. A., and Flanagan, W. M.

Members

Adkins, H. T., Waycross
Avera, Bertram P., Jr., VA Hospital,
Dublin
Bates, W. B., Jr., Waycross
Bradley, D. M., Waycross
Bussell, B. R., Waycross
Calhoun, W. C., Waycross
Clayton, Malcolm D., Jr., Waycross
Collins, Braswell E., Waycross

Davis, Floyd, Waycross
DeLoach, A. W., Waycross
Ferrell, T. J., Waycross
Flanagan, W. M., Waycross
Fleming, A., Folkston
Gay, Joseph R., Waycross
Goldman, Benj., Hazlehurst
Goldwasser, Fred L., Alma
Hafford, W. C., Waycross (de-
ceased)

Hawkins, L. M., Blackshear
Hendry, G. T., Blackshear
Hendry, Katherine M., Blackshear
Hendry, Wm. A., Blackshear
Jackson, Joseph M., Folkston
Johnson, R. L., Waycross (Hon.)
Knight, A. M., Jr., Waycross
Lee, Walter E., Jr., Waycross
Massey, Clayton M., Waycross
Mauldin, John W., Alma
McCollum, R. Roy, Jr., Kingsland
McCoy, W. R., Folkston
Minchew, B. H., Waycross
Mixon, W. D., Waycross (Hon.)
Muecke, H. W., Waycross
Oden, John W., Blackshear (Hon.)
Oden, Lewis H., Jr., Tyndall Field,
Panama City, Fla.
Oden, T. E., Blackshear
Parker, Charles O., Jr., U. S. Navy,
USS Consolation (Asso.)
Penland, J. E., Waycross
Pierce, Lovick W., Waycross
Pomeroy, W. L., Waycross
Reavis, W. F., Waycross
Schneider, W. J., Folkston
Seaman, Henry A., Waycross
Sharpe, W. W., III, Alma
Shuman, Vida, Waycross
Smith, Clyde, Jefferson-Hillman Hos-
pital, Birmingham, Ala. (Asso.)
Smith, Leo, Waycross
Stephens, John A., Ware County
Hospital, Waycross (Asso.)
Terry, D. B., Homerville
Trnlock, Albert S., Jr., VA Hos-
pital, Bay Pines, Fla.
Youmans, C. R., Hazlehurst

WARREN COUNTY

Officers

President.....Carson, H. B.
Secretary-Treasurer.....Daves, A. W.
Delegate.....Carson, H. B.
Alternate Delegate.....Ware, F. L.

Members

Carson, H. B., Warrenton
Davis, A. W., Warrenton
Kennedy, H. T., Warrenton
Ware, F. L., Warrenton

WASHINGTON COUNTY

Officers

President.....Newsom, N. J.
Vice-President.....Newsome, Emory G.
Sec.-Treas.....McElreath, F. T., Jr.
Delegate.....Rawlings, William
Alt. Delegate.....Newsome, Emory G.
Censors: Rogers, O. L.; Hilton, B.
L., and Taylor, R. L.

Members

Dillard, J. B., Davisboro (Hon.)
Helton, B. L., Sandersville
Hurt, Marion West, Sandersville
Lennard, O. D., Sandersville

Lever, Joseph E., Sandersville
McElreath, Farris T., Jr., Tenuille
Newsom, N. J., Sandersville
Newsome, Emory G., Sandersville
Overby, N., Sandersville
Rawlings, William, Sandersville
Rogers, O. L., Sandersville (Hon.)
Taylor, Ralph L., Davisboro

WAYNE COUNTY

Officers

President.....Yeomans, J. W.
Vice-President.....Leaphart, J. A.
Secretary-Treasurer.....Harper, F. M.
Delegate.....Pumpelly, Robert A.
Alternate Delegate.....Harper, F. M.

Members

Harper, Fred M., Jesup
Leaphart, J. A., Jesup
Pumpelly, Robert A., Jr., Jesup
Ritch, T. G., Jesup
Tyre, J. Lawton, Screven
Yeomans, James W., Jesup
Yeomans, Una Ritch, Jesup

WHITFIELD COUNTY

Officers

President.....Whitfield, Truman W.
Vice-President.....Rosen, E. A.
Secretary-Treasurer.....Ault, H. J.
Delegate.....Broadrick, G. L.
Alternate Delegate.....Bradley, Paul L.
Censors: Whitfield, Truman W.;
Bradford, J. E., and Whitley,
James R.

Members

Ault, H. J., Dalton (Hon.)
Baldwin, Robert E., Lawson VA
Hospital, Chamblee (Asso.)
Booser, Albert M., Dalton
Bradford, J. E., Spring Place
Bradley, Paul L., Dalton
Bradley, R. H., Chatsworth
Broadrick, G. L., Dalton
Carson, Willard P., Chatsworth
Dickie, E. H., Chatsworth
Erwin, H. L., Dalton (Hon.)
Mullins, James N., Chatsworth
Ragland, Fred B., Dalton
Rollins, J. C., 1211 W. Rugby, Col-
lege Park (Hon.)
Rosen, E. A., Dalton
Sams, Henry L., Dalton
Starr, Trammell, Dalton
Summerour, Brooke F., Dalton
Venable, John H., Dalton
Whitfield, Truman W., Dalton
Whitley, James R., Dalton
Wood, D. Lloyd, Dalton
Wood, Jay G., Vinings

WILCOX COUNTY

Officers

President.....Harris, V. L.
Vice-President.....Durham, Wm. P.
Secretary-Treasurer.....Owens, J. D.
Delegate.....Harris, V. L.
Alternate Delegate.....Estes, J. M.
Censors: Owens, J. D., and Bussell,
J. A.

Members

Bussell, J. A., Rochelle (Hon.)
Dorsey, Homer A., Pitts (Hon.)
Durham, Wm. P., Abbeville
Estes, J. M., Abbeville
Harris, V. L., Rochelle (Hon.)
Owens, J. D., Rochelle

WILKES COUNTY**Officers**

President _____ Nash, T. C.
 Vice-President _____ Wills, C. E., Jr.
 Secretary-Treasurer _____ Duggan, A. D.
 Delegate _____ LeRoy, A. G.
 Alternate Delegate _____ Adair, M. C.
 Censors: Casteel, L. R., and Simpson, A. W., Sr.

Members

Adair, M. C., Washington
 Casteel, L. R., Washington (Hon.)
 (deceased)
 Cheves, Harry L., Union Point
 Duggan, A. D., Washington

Gibson, F. N., Thomson
 Harriss, H. T., Washington (Hon.)
 LeRoy, A. G., Thomson
 Middlebrooks, Tracy W., Union Point
 Nash, T. C., Philomath
 Simpson, A. W., Washington (Hon.)
 Simpson, A. W., Jr., Washington
 Sims, Lewis S., Jr., Naval Air Dispensary, Box 8, Jacksonville, Fla.
 Smith, R. H., Lincolnton
 Stephens, R. G., Washington
 Wills, C. E., Washington
 Wills, Charles E., Jr., Washington
 Woods, O. S., Washington

WORTH COUNTY**Officers**

President _____ Tracy, J. L.
 Secretary-Treasurer _____ Davis, H. G., Jr.

Members

Bell, Peyton E., Sylvester (Hon.)
 Crowe, Norman J., Sylvester
 Davis, H. G., Jr., Sylvester
 Greer, Zack E., Macon-Bibb Health Center, Macon
 Jefford, T. C., Sylvester (Hon.)
 Stoner, W. P., Sylvester
 Sumner, C. S., Sylvester
 Tracy, J. L., Jr., Sylvester

IMPORTANT NOTICE

The Committee on Constitution and By-Laws of the Medical Association of Georgia will hold a meeting at the Hotel Dempsey, Macon, Georgia on January 10, 1951 at two o'clock in the afternoon. Members of the Association are cordially invited to present their views to the committee either in person or by letter.

ALLEN H. BUNCE, Atlanta, Chairman
 C. H. RICHARDSON, SR., Macon
 MARION C. PRUITT, Atlanta
 W. F. REAVIS, Waycross
 JOHN A. DUNAWAY, Atlanta, Attorney for the Association
 A. M. PHILLIPS, Macon, President
 EDGAR D. SHANKS, Atlanta, Secty-Treas.

NEWS ITEMS

Albany Crippled Children's Clinic held its third clinic since its founding in the pediatric section of the Phoebe Putney Hospital, Albany, October 13. One hundred and forty-six children from 24 South Georgia Counties were invited to attend the clinic, officials said. The clinic was staffed by State workers from Albany and Atlanta, and Dr. Edgar Dunlap, Atlanta, Emory Hospital, and Dr. Fred Murphy, Thomasville. The clinic is sponsored by the Crippled Children's Division of the Department of Welfare and is partially supported by the State and partially by interested Albany citizens. Children were examined and fitted with braces and appliances to assist them in better use of their limbs.

* * *

The American College of Surgeons at its 36th Convocation held in Symphony Hall, Boston, October 27, at the end of its annual Clinical Congress which opened October 23, received into fellowship 978 initiates, the largest class since 1914. Five honorary fellowships were also conferred. Dr. Arthur W. Allen, Boston, Chairman of the Board of Regents, presented the initiates following a colorful procession in which they and the officers, Regents, Governors and honored guests of the College wore the royal blue and scarlet Fellowship robes. The fellowships were conferred by the president, Dr. Henry W. Cave, New York. The fellowship address, "Quo Vadimus," was delivered by the Director of the College, Dr. Paul R. Hawley of Chicago. Georgia 1950 initiates are: Drs. Donald E. Beard, Atlanta; Robert B. Gottschalk, Savannah; C. Richard King, Atlanta; Robert B. Martin, III, Cuthbert; Charles P. Marvin, Atlanta; Lewis H. McDonald, Atlanta; James L. Pittman, Atlanta; Leon Douglas Porch, Macon; William Houser Proctor, Jr., Chamblee; Rivington H. Randolph, Athens; Richard E. Smoot, Decatur; Ben R. Thebaut, Atlanta, and William G. Whitaker, Jr., Atlanta.

* * *

The Appling County Medical Society held its first fall meeting in the Public Health Office, Baxley, October 17. Dr. J. B. Brown, Jr., Baxley, read a paper entitled, "Cortisone and Adrenocorticotrophic

Hormones." Dr. J. T. Holt, Baxley, was in charge of the November program.

* * *

Dr. Russell Andrews, Dr. Ralph Johnson and Dr. Robert Norton, all of Rome, participated in the medical forum broadcast over The News-Tribune Station WLAQ, Rome, October 12. They discussed in detail the proposed national health insurance plan and went into details of the cost of the plan should it become law, and the effect of national health insurance on the people of Great Britain. They also discussed an alternate program sponsored by the physicians of the country.

* * *

The Athens Medical Center, located on the corner of Prince Avenue and Chase Street, Athens, was opened October 23. The ultra-modern, efficiency-equipped Medical Center will house the offices of 12 physicians, two dentists and one druggist. The center will offer x-ray and general laboratory facilities, including equipment to give electrocardiograms and basal metabolism tests. Physicians of the corporation who have offices in the center include Drs. Paul Keller, Tom Meissner, Goodloe Y. Erwin, J. B. Neighbors, Jr., John F. Stegeman, James A. Green, Sam M. Talmadge, Herschel B. Harris, Thomas A. Dover, Marion A. Hubert, Holmes G. Byrd and John A. Simpson.

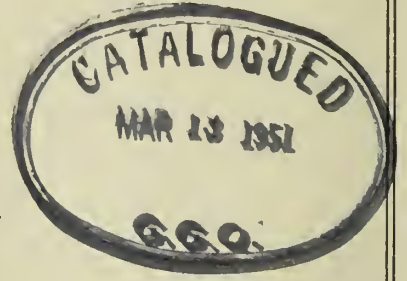
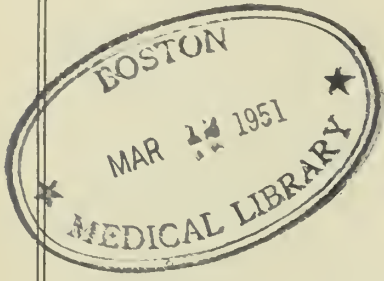
* * *

The Atlanta Federation of Trades and the Atlanta Tuberculosis Association, through its Industrial Hygiene Division, recently sponsored the third health education dinner forum held in Atlanta. Heart disease and high blood pressure were discussed. Dr. Carter Smith, Atlanta, spoke on "Heart Disease", emphasizing preventive medicine, regular check-ups, and danger signals. Dr. Vernon Powell, Atlanta, discussed "High Blood Pressure." Dr. L. M. Petrie and Dr. Randolph Smith, both of Atlanta, discussed health problems, illustrated with slides. Other diseases, including tuberculosis, cancer, and polio, will be discussed in the coming weeks. Each physician has kept in mind that he is speaking to laymen, and that they do not understand technical language.

* * *

Dr. L. Minor Blackford, Atlanta physician, and associate in medicine at Emory University School of Medicine, addressed the Southern Medical Association at its annual meeting in St. Louis, November 16, on "Certain Public Health Aspects of Heart Disease." The Cardiac Clinic at Grady Hospital provides services ranging from diagnosis and treatment of all kinds of heart diseases to help with the heart patient's financial and domestic problems, Dr. Blackford said. He said a social worker and her assistant were "important members" of the clinic staff. "They visit the home," he reported, "help the family adjust to the situation and perhaps help with the family budget. They suggest ways and means of entertaining the patient to keep him quiet . . . They may secure toys if the patient is a child. Sometimes they find the ladder bare

(Continued on Page 540)



The Journal
of the
Medical Association
of Georgia

INDEX

Volume XXXIX

JANUARY-DECEMBER, 1950

PUBLICATION COMMITTEE

Cleveland Thompson, M.D.
Edgar D. Shanks, M. D.

EDITOR

Edgar D. Shanks, M.D.

ASSOCIATE EDITORS

T. C. Davison, M.D.
Daniel C. Elkin, M.D.
Spencer A. Kirkland, M.D.
Jack C. Norris, M.D.
Edgar D. Shanks, Jr., M.D.
C. B. Upshaw, M.D.

BUSINESS MANAGER AND
EXECUTIVE SECRETARY

Viola Berry

INDEX TO SUBJECTS

A

Addison's Disease

- Carbohydrate Studies in Patients with Addison's Disease Treated with Testosterone Propionate and Cortisone. October 1950. Harley E. Cluxton, Jr., Savannah 408

Adenocarcinoma

- Adenocarcinoma of the Colon and Rectum. September 1950. D. F. Mullins, Jr., Athens 364

Analgesic Agents

- Clinical Impressions of Some of the Newer Analgesic Agents. February 1950. John M. Brown and Perry P. Volpitto, Augusta 63

Antabuse

- The Use of Antabuse in the Treatment of Alcoholism. November 1950. James N. Brawner, Jr., and Albert F. Brawner, Smyrna 449

B

Bicornate Uteri

- Bicornate Uteri: Obstetric Complications. February 1950. T. Schley Gatewood, Americus 54

Births

- The Two-Fold Problem of Premature Births. May 1950. Helen W. Bellhouse, Atlanta 216

Blood

- The Color of Feces Following the Instillation of Citrated Blood at Various Levels of the Small Intestine. October 1950. J. H. Hilsman, Atlanta 402

Brain Tumors

- Early Signs and Symptoms of Brain Tumors. November 1950. Charles E. Dowman, Atlanta 443

Breech Presentation

- Breech Presentation: Is Fetal Extension an Etiologic Factor? February 1950. Guy L. Calk, and Richard Torpin, Augusta 51

Burns

- Burns. January 1950. J. D. Martin, Jr., Richard Caudle, and J. M. B. Bloodwood, Jr., Atlanta 10

- Burns: Their Effects and Treatment. July 1950. Berry Bowman, Jr., Albany 269

Bursitis

- Roentgen Therapy for Bursitis of the Shoulder. May 1950. David Robinson, Savannah 205

C

Cancer

- The Routine Use of Exfoliative Cytologic Examinations for the Detection of Asymptomatic Cancer of the Cervix Uteri. July 1950. H. E. Nieburgs, and S. Bamford, Augusta 287

- Right Thoracic Approach in Combination with Laparotomy for Resection of Cancer of the Esophagus at the Level of the Arch of the Aorta. January 1950. Richard King, Atlanta 30

Carcinoma

- Carcinoma of the Stomach. June 1950. T. C. Davidson, and A. H. Letton, Atlanta 243

Carotid Sinus

- Carotid Sinus Syndrome. May 1950. C. Raymond Arp, Hal M. Davison, and John S. Atwater, Atlanta 196

Casarean Section

- Today's Indications for Cesarean Section. August 1950. M. M. Schneider, Savannah 313

D

Diabetes

- Diabetes in Pregnancy. February 1950. John R. McCain, and William M. Lester, Atlanta 57

Doctor

- Mind, Matter and the Doctor. June 1950. H. B. Jenkins, Donalsonville 246
- Doctors and the Public. November 1950. John E. Drewry, Athens 459

Duodenal Obstruction

- Congenital Intrinsic Duodenal Obstruction. January 1950. Lon Grove, and Earl Rasmussen, Atlanta 1

E

Editorials

- Advise Extreme Caution in Use of Newer Insecticides, October 1950 422
- A.M.A. Clinical Session, October 1950 421
- A.M.A. Council Summarizes Research on Vitamin E Therapy, March 1950 116
- A.M.A. Council Warns of Need for Information About Pesticides, February 1950 76
- A.M.A. Journal Refutes Medical Education Criticism, March 1950 114
- A.M.A. Membership Not Compulsory for Enrollment in Local Groups, January 1950 34
- A.M.A. Meets in Cleveland December 5-8, October 1950 423
- A.M.A. President Receives Letter, February 1950 74
- A.M.A. President Speaks, July 1950 302
- Are We Neglecting Skin Tumors?, January 1950 36
- Army Authorizes Appointment of Women Doctors as Reserve Corps Officers, October 1950 424
- Attribute Relief from Shaking Palsy to Psychotherapy, January 1950 35
- Aureomycin Reduces Childbirth Infection Possibilities, July 1950 304
- Awards, 1950, May 1950 214
- Awards, Macon Session, 1950, June 1950 256

Beware of Ticks This Spring, American Medical Association Says, May 1950	215	Medical Students Plan National Organization, December 1950	506
Calls Family Doctor Guide in Old Age November 1950	463	Medicine's Role in Civil Defense to Be Discussed, April 1950	174
Cites Desirability of Breast Feeding of Babies, April 1950	173	Mysterious Virus Disease in Medical Spotlight, November 1950	462
Civil Defense a Civilian Responsibility, July 1950	303	Name of Hygia, Health Magazine, to be Changed to Today's Health, January 1950	36
Compound F Reported Effective Against Rheumatic Arthritis, September 1950	386	New Eye Instrument May Help Prevent Blindness, May 1950	215
Constitution and By-Laws of the Medical Association of Georgia, 1950, March 1950	128	New Officers of the Association and Delegates to the A.M.A., May 1950	212
Diabetic Doctors Prove One Can Live Long and Remain Active, November 1950	462	New Test for Stomach Cancer Devised by New York Doctors, September 1950	388
Doctor Blames Eyes for 25 Per Cent of Headaches, November 1950	463	New Ulcer Drug Seen as Preventive of Surgery, August 1950	343
Doctor Draft Law, October 1950	420	No Preventative of Gray Hair Says Medical Authority, April 1950	174
Egyptian Drug Produces Good Results in Heart Disease, June 1950	256	Officers and Committees of the Medical Association of Georgia, March 1950	120
Electron Microscope Proving Big Aid in Medical Research, April 1950	174	Officers of the Medical Association of Georgia, March 1950	117
Enjoy Yourself: It is Later Than You Think, June 1950	254	One-Day Aureomycin Treatment for Gonorrhea Reported, July 1950	304
Federal Income Tax Laws Unfair to Professions, Says Economist, May 1950	214	Overeating Attributed to Environment and Emotions, September 1950	387
Find Blood Test for Cancer Not Suitable for Diagnosis at Present, April 1950	173	Physicians for the Armed Forces, August 1950	343
Find Chloramphenicol Useful Against Bacillary Dysentery, September, 1950	388	Portrait of Dr. Fischer Unveiled at the Crawford Long Hospital, January 1950	37
Find Ethyl Alcohol Unsatisfactory Disinfectant for Wounds, April 1950	174	Program for the 100th Annual Session of the Medical Association of Georgia, March 1950	124
Find 50,000 in Los Angeles Area Have Been Infected With Q Fever, April 1950	173	Program of the 100th Annual Session, March 1950	114
Find Mental Deficiency More Likely in Children Born to Mothers Over 40, July 1950	303	Recommends Early Treatment for Children Who Stutter, July 1950	307
Finds Persons with Blue Eyes Susceptible to Cancer Caused by Sunlight, July 1950	307	Report Early Treatment Prevents Painful Foot Deformities Later, February 1950	78
Georgia Physicians Who Have Practiced Medicine Fifty Years or More, March 1950	134	Report of Delegates to the American Medical Association, August 1950	343
Good Public Relations, July 1950	306	Report New Test for Cancer of Uterus, February 1950	76
Have a Cold? Keep it to Yourself, Advises Doctor, November 1950	464	Reports Poisoning from Use of Insecticide, February 1950	79
High Standard of Veteran Care Credited to Medical Leadership, September 1950	388	Report Successful Use of ACTH in Treatment of Gouty Arthritis, February 1950	76
Industrial Health Conference to be Held in Atlanta, December 1950	506	Reports X-Ray Superior Therapy in Breast Cancer Complications, December 1950	504
Infants Fare Well on Plane Flights, December 1950	506	Roster of the Association, December 1950	504
In Memoriam, March 1950	126	San Francisco Meeting of the American Medical Association, August 1950	342
Lack of Calcium Is Common Dietary Deficiency, March 1950	115	Scientific Exhibits, March 1950	127
Links High Blood Pressure to the American Way of Life, October 1950	424	Seven Types of Infantile Drivers Believed to Cause Traffic Accidents, September 1950	389
Link Lung Cancer to Prolonged Tobacco Smoking, June 1950	256	Skin Disease Attacks Florida Swimmers, February 1950	79
Macon Session, 1950, May 1950	212	Statement by James E. Paullin, M.D., on H.R. 6000. Submitted to the Senate Committee on Finance, April 1950	170
Medical Dues, 1950, January 1950	34		
Medical Opinion Is Needed Before Contact Lenses Are Worn, February 1950	79		

Surgeons Tattoo Eyeball in Newer Sight-Giving Operation, March 1950	116
Survey of Physicians' Incomes, April 1950	170
Synthesis of Active Portion of ACTH Seen as Possible, May 1950	214
Technical Exhibits, March 1950	127
Telegram re A.M.A. Dues, December 1950	505
Terramycin Reported Effective Against Two Types of Pneumonia, September 1950	389
The Alleged Shortage of Physicians, February 1950	74
The Amazing Year of 1949, February 1950	77
The Challenge . . . Public Relations, June 1950	252
Theory Suggests Prevention of Cancer by Artificial Feeding of Babies, February 1950	79
'Tired Feeling' is Major American Disease, January 1950	35
Toward Effective Cancer Control, April 1950	175
Treat Scarlet Fever With Human Blood Fraction, February 1950	79
United States Pharmacopeia, June 1950	253
Urges Immediate First-Aid Training in Care of Atomic Bomb Casualties, September 1950	386
Use Aureomycin Against Influenzal Meningitis, April 1950	176
Use Penicillin to Prevent Rheumatic Fever Recurrence, March 1950	115
U. S. Ranks With Leading Nations in Preventing Infant Deaths, April 1950	174
What is the Health Future of Your Child? October 1950	424
Where Are Our Large Families? July 1950	304
Whooping Cough Yield to Antibiotic Drug, January 1950	34
William Farrell Reavis, M.D., May 1950	213
Worry, January 1950	35
Edward Campbell Davis	
Edward Campbell Davis, M.D., July 1950	
Isabella Arnold Bunce, Atlanta	299
Encephalitis	
A Case of Post-Vaccinal Encephalitis Treated with Chloromycetin. June 1950. David S. Mann, and Frank E. Thomas, Albany	242
Endometriosis	
Endometriosis: The Urgency for Early Diagnosis and Treatment. July 1950. Edgar H. Greene, Atlanta	283
Eye	
The Eye in the Advancing Years. February 1950. Morgan B. Raiford, Atlanta	66

F

Feet	
Treatment of Flat Feet in Children. August 1950. J. H. Kite, and W. W. Lovell, Atlanta	335

Fractures

The Treatment of Fractures of the Middle Third of the Face. November 1950. Frank F. Kanthak, Atlanta	441
Intramedullary Nailing of Fractures of Long Bones. June 1950. J. C. Patterson, Cuthbert	232

G

Gastrointestinal

Gastrointestinal Allergy. October 1950. John L. Jacobs, Atlanta	405
Gastrointestinal Allergy in Children. April 1950. Harold W. Muecke, Waycross	150
The Diagnosis of Obstructive Lesions of the Gastrointestinal Tract of the New-born Infant. August 1950. M. Hines Roberts, Atlanta	320
Gastric Disorders	
The Gastroscope as a Diagnostic Aid in Gastric Disorders, September 1950. John S. Atwater, Atlanta	359

Goiter

Goiter: Hashimoto Type. January 1950. T. C. Davison and A. H. Letton, Atlanta	19
---	----

H

Heart

Use of the Oral Mercurial Diuretics in Advanced Congestive Heart Failure. July 1950. J. Gordon Barrow and Clayton R. Sikes, Atlanta	276
Stab Heart Repair. June 1950. Cecil B. Elliott, Cedartown	249
Vocational Rehabilitation of Cardiac Patients. December 1950. Joseph C. Massee, Atlanta	495

Hemorrhoids

The Injection Treatment of Hemorrhoids. July 1950. Fred B. Hodges, Jr., Atlanta	279
---	-----

Hernia

Diaphragmatic Hiatus Hernia. September 1950. Sandy B. Carter, Atlanta	374
---	-----

History

History of the Medical Association of Georgia, 1881-1949. March 1950. Frank K. Boland, Atlanta	89
--	----

Hospital

Integrated Hospital Service. February 1950. Tully T. Blalock, Atlanta	72
---	----

Hypnosis

Hypnosis in Therapy. December 1950. Richard M. Nelson, and Corbett H. Thigpen, Augusta	473
--	-----

Hypothyroidism

Masked Hypothyroidism as a Basis for Symptoms. April 1950. W. Edward Storey, Columbus	156
---	-----

I

Insecticides

Organic Phosphorus Insecticides. February 1950. Lester M. Petrie, Atlanta	81
---	----

Intussusception

- An Analysis of Fifteen Cases of Intussusception. September 1950. John W. Turner, and August B. Turner. Atlanta 369

K**Key**

- Presentation of the President's Gold Key to Enoch Callaway, M.D., September 1950. David Henry Poer, Atlanta 377

L**Legislation**

- Legislation. February 1950. Enoch Callaway, LaGrange 73

M**Medical Services**

- Medical Services in the Department of Defense. June 1950. Richard L. Meiling, Washington, D. C. 231

Medicine

- Medicine and Freedom. May 1950. Ernest E. Irons, Chicago 185
Medicine Versus Politics. March 1950. Enoch Callaway, LaGrange 113

Methemoglobinemia

- Methemoglobinemia Caused by Nitrate Pollution in Drinking Water. June 1950. Gilbert R. Frith, Atlanta 258

N**Neck**

- Neck Dissections. April 1950. Milford B. Hatcher, Macon 145

Nerve

- The Relief of Distressing Pain By Interrupting Nerve Pathways. November 1950. Exum Walker, Atlanta 446

Nipple Discharge

- The Significance of Nipple Discharge. July 1950. B. T. Beasley, Atlanta 281

Nurse

- Nurse Midwife Service in Walton County, Georgia. June 1950. Ernest Thompson, Monroe 238

O**Obstructive Lesions**

- Some Obstructive Lesions in the Newborn. June 1950. J. Dudley King, Atlanta 250

Opportunities

- New Opportunities and Responsibilities. April 1950. Enoch Callaway, LaGrange 169

P**Pain**

- Diagnostic and Therapeutic Block for the Treatment of Pain. May 1950. C. MacKenzie Brown, Albany 207

Pancreatic Disease

- Chronic Pancreatic Disease. September 1950. Charles W. Hock, Augusta 361
Acute Pancreatitis. January 1950. William G. Whitaker, Jr., Atlanta 26

Papanicolaou Smear

- The Papanicolaou Smear: In Retrospect and Future. April 1950. Jack C. Norris, Atlanta 168

Peritoneal

- Peritoneal Drainage. October 1950. J. Benham Stewart, Macon 399

Pilonidal

- Pilonidal Cyst and Sinus. April 1950. Needham B. Bateman, William H. Bateman, Gregory W. Bateman, and Joseph D. Woddail, Atlanta 148

Plastic Surgery

- Horizons of Modern Plastic Surgery. November 1950. John R. Lewis, Jr., Atlanta 438

Poliomyelitis

- Diagnosis and Early Management of Acute Poliomyelitis. August 1950. Marvin L. Davis, Atlanta 327

President's Address

- President's Address. September 1950. Walter C. Payne, Pensacola, Fla. 379

Psychiatric Practice

- Sudden Death in a Psychiatric Practice. December 1950. Joseph D. McElroy, Atlanta 479

Public Relations

- The M.D. Goes PR. December 1950. Lawrence W. Rember, Chicago 498
Public Relations: Good and Bad. January 1950. Enoch Callaway, LaGrange 33

R**Rehabilitation**

- Rehabilitation of the Crippled Child. August 1950. Harriet E. Gillette, Atlanta 332

Rh Factor

- The Clinical Implications of the Rh Factor. July 1950. E. B. Saye, Thomasville 292

S**Syndrome**

- The Adrenogenital Syndrome. December 1950. Ralph Hill Chaney, and Robert B. Greenblatt, Augusta 482

Syphilis

- Abulatory Treatment of Syphilis with Aureomycin. June 1950. C. H. Chen, R. B. Dienst, and R. B. Gleenblatt, Augusta 237
The Prevention of Congenital Syphilis. January 1950. Rudolph W. Jones, Jr., Atlanta 38

T**Traumatic Rupture**

- Management of Traumatic Rupture and Stricture of the Membranous Urethra Complicating Fracture of the Pelvis. November 1950. James H. Semans, Atlanta 435

Tuberculosis

- Tuberculosis: Suggestions for Improved

Control. September 1950. H. C. Schenck, Atlanta	390
Tumors	
The Common Tumors of the Genito-urinary Tract Clinical Aspects. December 1950. Robert W. McAllister, Macon	487
Typhus	
Biologic Activities of the Georgia Typhus Control Program. July 1950. Roy J. Boston, Atlanta	308

U

Ulcer	
The Choice of Operation in Gastric and Duodenal Ulcer. September 1950. C. H. Richardson, Jr., Macon	366

V

Virus	
Newcastle Virus Disease. April 1950. Ed- win R. Watson, and Marvin M. Harris, Macon	154
Coxsackie Virus. December 1950. John E. McCroan, Jr., Atlanta	507

W

Welfare	
The Welfare State Versus the Welfare of the State. May 1950. Enoch Callaway, LaGrange	191

INDEX OF AUTHORS

A

Arp, C. Raymond, Atlanta	
Davison, Hal M., Atlanta	
Atwater, John S., Atlanta	
Carotid Sinus Syndrome. May 1950	196
Atwater, John S., Atlanta	
Arp, C. Raymond, Atlanta	
Davison, Hal M., Atlanta	
Carotid Sinus Syndrome. May 1950	196
Atwater, John S., Atlanta	
The Gastroscope as a Diagnostic Aid in Gastric Disorders. September 1950	359

B

Bamford, S., Augusta	
Nieburgs, H. E., Augusta	
The Routine Use of Exfoliative Cytologic Examinations for the Detection of Asymptomatic Cancer of the Cervix Uteri. July 1950	287
Barrow, J. Gordon, Atlanta	
Sikes, Clayton R., Atlanta	
Use of the Oral Mercurial Diuretics in Advanced Congestive Heart Failure. July 1950	276
Bateman, Needham B., Atlanta	
Bateman, William H., Atlanta	
Bateman, Gregory W., Atlanta	
Woddail, Joseph D., Atlanta	
Pilonidal Cyst and Sinus. April 1950	148
Beasley, B. T., Atlanta	
The Significance of Nipple Discharge. July 1950	281

Bellhouse, Helen W., Atlanta	
The Two-Fold Problem of Premature Births. May 1950	216
Blalock, Tully T., Atlanta	
Integrated Hospital Service. February 1950	72
Bloodworth, J. M. B., Jr., Atlanta	
Martin, J. D., Jr., Atlanta	
Caudle, Richard, Atlanta	
Burns. January 1950	10
Boland, Frank K., Atlanta	
History of the Medical Association of Geor- gia, 1881-1949. March 1950	89
Boston, Roy J., Atlanta	
Biologic Activities of the Georgia Typhus Control Program. July 1950	308
Bowman, Berry, Jr., Albany	
Burns: Their Effects and Treatment. July 1950	269
Brawner, James N., Jr., Smyrna	
Brawner, Albert F., Smyrna	
The Use of Antabuse in the Treatment of Alcoholism. November 1950	449
Brown, C. MacKenzie, Albany	
Diagnostic and Therapeutic Block for the Treatment of Pain. May 1950	207
Brown, John M., Augusta	
Volpitto, Perry P., Augusta	
Clinical Impressions of Some of the Newer Analgesic Agents. February 1950	63
Bunce, Isabella Arnold, Atlanta	
Edward Campbell Davis, M.D., July 1950	299

C

Calk, Guy L., Augusta	
Torpin, Richard, Augusta	
Breech Presentation: Is Fetal Extension an Etiologic Factor? February 1950	51
Callaway, Enoch, LaGrange	
Legislation. February 1950	73
Medical Versus Politics. March 1950	113
New Opportunities and Responsibilities. April 1950	169
Public Relations: Good and Bad. January 1950	33
The Welfare State Versus the Welfare of the State. May 1950	191
Carter, Sandy B., Atlanta	
Diaphragmatic Hiatus Hernia. September 1950	374
Caudle, Richard, Atlanta	
Martin, J. D., Jr., Atlanta	
Bloodworth, J. M. B., Jr., Atlanta	
Burns. January 1950	10
Chaney, Ralph H., Augusta	
Greenblatt, Robert B., Augusta	
The Adrenogenital Syndrome. December 1950	482
Chen, C. H., Augusta	
Dienst, R. B., Augusta	
Greenblatt, R. B., Augusta	
Ambulatory Treatment of Syphilis with Aureomycin. June 1950	237

- Cluxton, Harley E., Jr., Savannah
Carbohydrate Studies in Patients with Addison's Disease Treated with Testosterone Propionate and Cortisone. October 1950. 408

D

- Davis, Marvin L., Atlanta
Diagnosis and Early Management of Acute Poliomyelitis. August 1950. 327
- Davison, Hal M., Atlanta
- Arp, C. Raymond, Atlanta
- Atwater, John S., Atlanta
Carotid Sinus Syndrome. May 1950. 196
- Davison, T. C., Atlanta
- Letton, A. H., Atlanta
Carcinoma of the Stomach. June 1950. 243
Goiter: Hashimoto Type. January 1950. 19
- Dienst, R. B., Augusta
- Chen, C. H., Augusta
- Greenblatt, R. B., Augusta
Ambulatory Treatment of Syphilis With Aureomycin. June 1950. 237
- Dowman, Charles E., Atlanta
Early Signs and Symptoms of Brain Tumors. November 1950. 443
- Drewry, John E., Atlanta
Doctors and the Public. November 1950. 459

E

- Elliott, Cecil B., Cedartown
Stab Heart Repair. June 1950. 249

F

- Frith, Gilbert R., Atlanta
Methemoglobinemia Caused by Nitrate Pollution in Drinking Water. June 1950. 258

G

- Gatewood, T. Schley, Americus
Bicornate Uteri: Obstetric Complications. February 1950. 54
- Gillette, Harriet E., Atlanta
Rehabilitation of the Crippled Child. August 1950. 332
- Greenblatt, R. B., Augusta
- Chen, C. H., Augusta
- Dienst, R. B., Augusta
Ambulatory Treatment of Syphilis with Aureomycin. June 1950. 237
- Greenblatt, Robert B., Augusta
- Chaney, Ralph H., Augusta
The Adrenogenital Syndrome. December 1950. 482
- Greene, Edgar H., Atlanta
Endometriosis: The Urgency for Early Diagnosis and Treatment. July 1950. 283
- Grove, Lon, Atlanta
- Rasmussen, Earl, Atlanta
Congenital Intrinsic Duodenal Obstruction. January 1950. 1

H

- Harris, Marvin M., Macon
- Watson, Edwin R., Macon
Newcastle Virus Disease. April 1950. 154

- Hatcher, Milford B., Macon
Neck Dissections. April 1950. 145
- Hilsman, J. H., Atlanta
The Color of Feces Following the Instillation of Citrated Blood at Various Levels of the Small Intestines. October 1950. 402
- Hock, Charles W., Augusta
Chronic Pancreatic Disease. September 1950. 361
- Hodges, Fred B., Jr., Atlanta
The Injection Treatment of Hemorrhoids. July 1950. 279

I

- Irons, Ernest E., Chicago
Medicine and Freedom. May 1950. 185

J

- Jacobs, John L., Atlanta
Gastrointestinal Allergy. October 1950. 405
- Jenkins, H. B., Donalsonville
Mind, Matter and the Doctor. June 1950. 246
- Jones, Rudolph W., Jr., Atlanta
The Prevention of Congenital Syphilis. January 1950. 38

K

- Kanthak, Frank F., Atlanta
The Treatment of Fractures of the Middle Third of the Face. November 1950. 441
- King, J. Dudley, Atlanta
Some Obstructive Lesions in the Newborn. June 1950. 250
- King, Richard, Atlanta
Right Thoracic Approach in Combination with Laparotomy for Resection of Cancer of the Esophagus at the Level of the Arch of the Aorta. January 1950. 30
- Kite, J. H., Atlanta
- Lovell, W. W., Atlanta
Treatment of Flat Feet in Children. August 1950. 335

L

- Letton, A. H., Atlanta
- Davison, T. C., Atlanta
Carcinoma of the Stomach. June 1950. 243
Goiter: Hashimoto Type. January 1950. 19
- Lester, William M., Atlanta
- McCain, John R., Atlanta
Diabetes in Pregnancy. February 1950. 57
- Lewis, John R., Jr., Atlanta
Horizons of Modern Plastic Surgery. November 1950. 438
- Lovell, W. W., Atlanta
- Kite, J. H., Atlanta
Treatment of Flat Feet in Children. August 1950. 335

M

- Mann, David S., Ablany
- Thomas, Frank E., Albany
A Case of Post-Vaccinal Encephalitis Treated with Chloromycetin. June 1950. 242

Martin, J. D., Jr., Atlanta		Richardson, C. H., Jr., Macon	
Caudle, Richard, Atlanta		The Choice of Operation in Gastric and Duodenal Ulcer. September 1950	366
Bloodworth, J. M. B., Jr., Atlanta		Roberts, M. Hines, Atlanta	
Burns. January 1950	10	The Diagnosis of Obstructive Lesions of the Gastrointestinal Tract of the New-born Infant. August 1950	320
Massee, Joseph C., Atlanta		Robinson, David, Savannah	
Vocational Rehabilitation of Cardiac Patients. December 1950	495	Roentgen Therapy for Bursitis of the Shoulder. May 1950	205
McAllister, Robert W., Macon			
The Common Tumors of the Genito-Urinary Tract Clinical Aspects. December 1950	487	S	
McCain, John R., Atlanta		Saye, E. B., Thomasville	
Lester, William M., Atlanta		The Clinical Implications of the Rh Factor. July 1950	292
Diabetes in Pregnancy. February 1950	57	Schenck, H. C., Atlanta	
McCroan, John E., Jr., Atlanta		Tuberculosis: Suggestions for Improved Control. September 1950	390
Coxsackie Virus. December 1950	507	Schneider, M. M., Savannah	
McElroy, Joseph D., Atlanta		Today's Indications for Cesarean Section. August 1950	313
Sudden Death in Psychiatric Practice. December 1950	479	Semans, James H., Atlanta	
Meiling, Richard L., Washington, D. C.		Management of Traumatic Rupture and Stricture of the Membranous Urethra Complicating Fracture of the Pelvis. November 1950	435
Medical Services in the Department of Defense. June 1950	231	Sikes, Clayton R., Atlanta	
Muecke, Harold W., Waycross		Barrow, J. Gordon, Atlanta	
Gastrointestinal Allergy in Children. April 1950	150	Use of the Oral Mercurial Diuretics in Advanced Congestive Heart Failure. July 1950	276
Mullins, D. F., Jr., Athens		Stewart, J. Benham, Macon	
Adrenocarcinoma of the Colon and Rectum. September 1950	364	Peritoneal Drainage. October 1950	399
		Storey, W. Edward, Columbus	
N		Masked Hypothyroidism as a Basis for Symptoms. April 1950	156
Nelson, Richard M., Augusta			
Thigpen, Corbett H., Augusta		T	
Hypnosis in Therapy. December 1950	473	Thigpen, Corbett H., Augusta	
Nieburgs, H. E., Augusta		Nelson, Richard M., Augusta	
Bamford, S., Augusta		Hypnosis in Therapy. December 1950	473
The Routine Use of Exfoliative Cytologic Examinations for the Detection of Asymptomatic Cancer of the Cervix Uteri. July 1950	287	Thomas, Frank E., Albany	
Norris, Jack C., Atlanta		Mann, David S., Albany	
The Papanicolaou Smear: In Retrospect and Future. April 1950	168	A Case of Post-Vaccinal Encephalitis Treated with Chloramphenicol. June 1950	242
		Thompson, Ernest, Monroe	
P		Nurse Midwife Service in Walton County, Georgia. June 1950	238
Patterson, J. C., Cuthbert		Torpin, Richard, Augusta	
Intramedullary Nailing of Fractures of Long Bones. June 1950	232	Calk, Guy L., Augusta	
Payne, Walter C., Pensacola, Fla.		Breech Presentation: Is Fetal Extension an Etiologic Factor? February 1950	51
President's Address. September 1950	379	Turner, John W., Atlanta	
Petrie, Lester M., Atlanta		Turner, August B., Atlanta	
Organic Phosphorus Insecticides. February 1950	81	An Analysis of Fifteen Cases of Intussusception. September 1950	369
Poer, David Henry, Atlanta			
Presentation of the President's Gold Key to Enoch Callaway, M.D., September 1950	377	V	
		Volpitta, Perry P., Augusta	
R		Brown, John M., Augusta	
Raiford, Morgan B., Atlanta		Clinical Impressions of Some of the Newer Analgesic Agents. February 1950	63
The Eye in the Advancing Years. February 1950	66		
Rasmussen, Earl, Atlanta		W	
Grove, Lon, Atlanta		Walker, Exum, Atlanta	
Congenital Intrinsic Duodenal Obstruction. January 1950	1	The Relief of Distressing Pain by Inter-	
Rember, Lawrence W., Chicago			
The M.D. Goes PR. December 1950	498		

rupting Nerve Pathways. November 1950	446
Watson, Edwin R., Macon	
Harris, Marvin M., Macon	
Newcastle Virus Disease. April 1950	154
Whitaker, William G., Jr., Atlanta	
Acute Pancreatitis. January 1950	26
Woddail, Joseph D., Atlanta	
Bateman, Needham B., Atlanta	
Bateman, William H., Atlanta	
Bateman, Gregory W., Atlanta	
Pilonidal Cyst and Sinus. April 1950	148

NEWS ITEMS

(Continued from Page 531)

and may have to call on some social agency for help." Dr. Blackford said he hoped Georgia some day would have a "convalescent home-school for our children crippled by heart disease so that their education will be interrupted as little as possible."

The Atlanta physician pointed out that some 20 other physicians in the Atlanta area donate part of their time to assisting at the Cardiac Clinic. He explained that six visiting nurses, specially trained in heart disease, carry many services of the clinic directly to the patients' homes. He attributed the success of the Cardiac Clinic to the cooperation of the supporting agencies, including Grady Memorial Hospital, Emory University School of Medicine, the Fulton County Department of Health, the Georgia Heart Association and the American Heart Association.

Other Georgia physicians on the program were: Section on General Practice: "The Management of Whooping Cough," Dr. Richard W. Blumberg, Atlanta. Discussion opened by Dr. Albert Rauber, Atlanta. Section on Medicine: Dr. Carter Smith, Atlanta, Vice-Chairman; "Effect of Cortisone on Various Bacterial Infections" (Lantern Slides), Dr. Max Michael, Jr., Atlanta; "A Simplified and Practical Vectorial Method of Electrocardiographic Interpretation" (Lantern Slides), Dr. J. Willis Hurst, Emory University. Section on Neurology and Psychiatry: "Spontaneous Thrombosis of Internal Carotid Artery," Dr. Homer S. Swanson, Emory University; Discussion opened by Dr. Rives Chalmers, Atlanta. Section on Pediatrics: Dr. Wm. L. Funkhouser, Atlanta, Chairman; Chairman's Address: "The South's Service to the Crippled Child" (Lantern Slides), Dr. Wm. L. Funkhouser. Section on Radiology: Dr. Robert C. Pendergrass, Americus, Secretary; "Problems in Diagnosis of Carcinoma of the Lung" (Lantern Slides), Dr. Stephen W. Brown, Augusta. Section on Dermatology and Syphilology: "A Simplified Method of Cryotherapy for Acne Vulgaris," Dr. William L. Dobes, Atlanta; "Ringworm of the Scalp: Treatment with Spergon, Clinical and Laboratory Analysis," Drs. Joseph L. Rankin, William L. Dobes, Jack W. Jones and Herbert S. Alden, Atlanta. Section on Allergy: Dr. Mason I. Lowance, Atlanta, Chairman; Chairman's Address: "A Plea for Standardization of Skin Testing Material" (Lantern Slides), Dr. Mason I. Lowance, Atlanta; "Some Suggestions on the Dermatologic Care of the Atopic Patient" (Lantern Slides), Dr. Herbert S. Alden, Atlanta. Section on Industrial Medicine and Surgery: "Health Maintenance for Small Plants" (Lantern Slides), Dr. Lester M. Petrie, Atlanta. Section on Surgery: Dr. David Henry Poer, Atlanta, Chairman; Discussion of "Sarcoma of the Breast," Dr. Enoch Callaway, LaGrange; Discussion of paper, "Indications for Procedure in Plastic Surgery of the Nose," Dr. William G. Hamm, Atlanta; "Chairman's Address: 'Carcinoma of the Infra-ampullary Portion of the Duodenum'" (Lantern Slides), Dr. David Henry Poer, Atlanta. Section on Orthopedic and Traumatic Surg-

ery; Dr. Charles E. Irwin, Warm Springs, Chairman; Chairman's Address: "The Calcaneus Foot" (Lantern Slides), Dr. Charles E. Irwin, Warm Springs; "Fatigue Fractures of the Tibia" (Lantern Slides), Dr. Robert P. Kelly, Emory University, and Dr. Fred E. Murphy, Thomasville. Section on Urology: Dr. Harold P. McDonald, Atlanta, Secretary; "Transurethral Resection of the Bladder Neck in Treatment of Congenital Abnormalities in Children" (Lantern Slides), Dr. J. Robert Rinker, Augusta; Discussion of paper "The Neglected Female Urethra," Dr. Willis P. Jordan, Jr., Columbus; Discussion of paper "Ordinary Problems Met Within Electrosurgery of the Bladder Neck and Their Solution," Dr. Reese C. Coleman, Jr., Atlanta; Discussion of paper "Melanoma of the Organs of the Urinary Tract with Particular Reference to the Prostate Gland," Dr. Rudolph Bell, Thomasville. Section on Proctology: "Oil Soluble Anesthetics in Proctology," Dr. A. M. Phillips, Macon. Section on Ophthalmology and Otolaryngology: "Practical Therapeutics in Otolaryngology," Dr. William C. Warren, Jr., Atlanta. Section on Anesthesiology: Dr. Perry P. Volpitto, Augusta, Chairman; Dr. David A. Davis, Augusta, Secretary. Section on Public Health: Dr. T. F. Sellers, Atlanta, Chairman; Chairman's Address: "The Relation of Public Health to Medical Practice," Dr. T. F. Sellers, Atlanta; "The Georgia Plan of Multiphase Testing," Dr. C. D. Bowdoin, Atlanta; "Certain Public Health Aspects of Heart Disease," Dr. L. Minor Blackford, Atlanta. American College of Chest Physicians, Southern Chapter: "Bacteriologic Diagnosis in Tuberculosis," Dr. Martin M. Cummings, Atlanta; "The Surgical Treatment of Asthma Emphysema, Bullae and Blebs" (Lantern Slides), Dr. Osler A. Abbott, Atlanta. Scientific Exhibits: "Bentyl Hydrochloride: A New Antispasmodic," Dr. Charles W. Hock, Augusta; "Agents of Tinea Capitis in the United States," U. S. Public Health Service, Communicable Disease Center, Mycology Unit, Atlanta; "The Role of Hormones in Carcinogenesis and Therapy," Dr. H. E. Nieburgs, Augusta. Motion Pictures: "Vaginal Hysterectomy," Drs. Olin S. Cofer and Albert L. Evans, Atlanta; "Uterine Cancer: Pathogenesis Detection and Diagnosis," Drs. H. E. Nieburgs, E. R. Pund and S. Bamford, B.S., Augusta. Other physicians attending the above named meeting were: Dr. Olin S. Cofer, Atlanta, representing Georgia as a member of the Council; Drs. C. C. Aven, B. T. Beasley, James N. Brawner, Sr., Edgar M. Dunstan, Murdock Euen, Howard Hailey, John R. Lewis, Jr., W. A. Selman, John W. Turner and R. Hugh Wood, all of Atlanta.

* * *

Dr. Frank K. Boland, Atlanta, physician and professor of clinical surgery, Emory University School of Medicine, spoke at the Emory Hospital Auditorium, October 25. His subject was the title of his recent book, "The First Anesthetic, the Story of Crawford Long." This was the first of three lectures on major historical advances in medicine contemplated for the fall quarter at Emory. The public was invited.

* * *

Dr. Ralph O. Bowden, Savannah physician, recently was guest speaker at the meeting of the Junior Chamber of Commerce held at the Hotel Savannah. Dr. Bowden discussed the need for a new 250-bed hospital in Savannah.

* * *

Dr. Richard P. Campbell, formerly of Rockmart, announces the opening of his office in the Hollingsworth Building, Fayetteville, for the practice of medicine. Dr. Campbell is a graduate of University of Georgia School of Medicine, Augusta. He served a 15-month internship at the Jersey City Medical Center and later was a medical officer aboard the cruisers Fresno and Albany for two years. He recently completed a residency at the Crawford W. Long Memorial Hospital, Atlanta.

The Chatham-Savannah Health Council met in Jenkins Hall of Armstrong College, Savannah, October 16. Dr. Albert J. Kelley, president of the council, presided. Colonel Frank A. Kopf, Atlanta, Civil Defense Coordinator for Georgia, was guest speaker, and spoke on "Civilian Defense." He also showed a film, "The Atom Strikes," depicting the bombing of Hiroshima and Nagasaki. National authorities are alarmed that preparation for civilian defense has lagged and are urging each and every community to take steps to rectify this as soon as possible.

* * *

Dr. Abe J. Davis, Augusta, Health Commissioner for Richmond County, recently spent a week in St. Louis, Mo., where he attended a meeting of the American Public Health Association.

Dr. Davis recently spoke on "Tuberculosis, a Community Problem," at a luncheon meeting of the Woman's Auxiliary to the Richmond County Medical Society held in the Crystal Room of the Bon Air Hotel, Augusta.

* * *

Emory University School of Medicine, Atlanta, is accepting applications for scholarships recently established in honor of Dr. James E. Paullin. Dean R. Hugh Wood recently announced. Dean Wood said financial need and scholastic standing will be considered in awarding the scholarships. The first awards will be given for the 1951-52 school session. They are planned largely to assist students during their second and third years in medical school. Dr. Paullin, professor emeritus of clinical medicine, retired from Emory faculty last years after 42 years of service.

* * *

Dr. R. H. Fike, Moultrie, radiologist of Vereen Memorial Hospital, spends each Wednesday afternoon at the Mitchell County Hospital, Camilla, interpreting x-ray films and doing fluoroscopy. In cases of emergency he is available at all times. Before moving to Moultrie, Dr. Fike was head of Steiner Clinic, Atlanta, for 25 years. Dr. Fike is a major asset to the hospitals at Moultrie and Camilla.

* * *

Dr. Ralph W. Fowler, Marietta physician, was recently appointed the ninth member of the Kenne-tone Hospital Authority by Marietta City Council. Dr. Fowler is the first nonbusinessman selected for the five-month-old hospital's administrative authority.

* * *

The Fulton County Medical Society held its semi-monthly dinner meeting at the Academy of Medicine, Atlanta, November 2. Scientific program: Dr. Mason I. Lowance, moderator, "Medical Care Today: Are We Using It to the Best Advantage?"; Dr. McClaren Johnson; "Patients and Physicians in the Modern Hospitals"; Mr. Edwin B. Peel; "Insurance Companies' Part in Voluntary Prepaid Medical Care Plans"; Mr. Lambert G. Schulze. The National Health Week program was open to the public.

* * *

The Eighth District Medical Society held its semi-annual meeting at the King and Prince Hotel, St. Simons Island, October 13 and 14. Scientific program: "Recent Advances in Eye Surgery," Dr. B. H. Minchew and Dr. Braswell E. Collins, Waycross; "Cardiac Arrhythmias," Dr. Arthur Knight, Jr., Waycross; "Carcinoma of the Cervix," Dr. Enoch Callaway, LaGrange; "Office Gynecology," Dr. George A. Niles, Atlanta; "Taxes, Temperatures and Tonics," Porter F. Gould, Brunswick. Dr. J. B. Avera, Brunswick, was re-elected president; Dr. J. L. Campbell, Jr., Valdosta, secretary-treasurer. The spring meeting will be held in Waycross next April.

* * *

Dr. Marion Estes, Augusta, associate professor of psychiatry and neurology at the Medical College of Georgia, has resigned that position to accept an appointment at Dix Hill Hospital, Raleigh, N. C. Dr. Estes will be clinical director at the Dix Hill Hospital,

and will participate also in training residents in that hospital. Dr. Estes, a graduate of the Medical College of Georgia, Augusta, class of 1943, has just passed the examination of the American Board of Psychiatry. Dr. Hervey Cleckley, Augusta, head of the department of psychiatry and neurology, said that no one will be appointed at present to fill Dr. Estes' place on the faculty of the Medical College of Georgia. The work will be carried on by Dr. Cleckley and Dr. Corbett H. Thigpen, assistant professor of psychiatry and neurology.

* * *

Dr. R. W. Edenfield, Macon physician, recently attended the annual Clinical Congress of the American College of Surgeons held in Boston, Mass.

* * *

Dr. Charles B. Fulghum, Milledgeville, a member of the Richard Binion Clinic, recently spent a week at Duke University School of Medicine, Durham, N. C., taking a special course at the medical center there.

* * *

The Georgia Chapter of American Academy of General Practice held its second annual meeting at the Dempsey Hotel, Macon, October 26. More than 100 Georgia general practitioners attended the meeting. Dr. Josiah Crudup, Gainesville, president of Brenau College, was guest speaker. His subject was "Think Twice America." The new officers are: Dr. Walter W. Daniel, Atlanta, president; Dr. J. B. Kay, Byron, vice president; Dr. Albert R. Bush, Hawkinsville, secretary-treasurer. Directors: Dr. Steve P. Kenyon, Dawson; Dr. Lee E. Williams, Cordele; Dr. Frank Vinson, Fort Valley, and Dr. Edwin W. Turner, East Point.

* * *

The Georgia Medical Society held its regular meeting at 612 Drayton Street, Savannah, November 14. Program: "Blood Needs for Armed Forces and Civilian Defense," Dr. George B. Dowling, Medical Director, American Red Cross, Southeastern Area. Dr. Sam Youngblood, Jr., secretary.

* * *

Dr. Wood Goss, formerly of Richland, announces the removal of his office to Ashburn where he will be associated with his brother, Dr. C. C. Goss, Ashburn, for the practice of medicine and surgery.

* * *

Dr. Harriet E. Gillette, Atlanta, medical director of Aidmore Children's Convalescent Hospital, recently spoke at the annual convention of the National Society for Crippled Children and Adults in Chicago, Ill. Dr. Gillette took part in a clinical demonstration illustrating "Easter Seals at Work." Georgia Secretary of State Ben W. Fortson, Jr., Atlanta, participated in the opening day program at the convention. He was one of a group of distinguished persons who have overcome handicaps to attain success.

* * *

Dr. F. F. Griffith, Eatonton physician, was recently given a surprise testimonial dinner at the First Methodist Church on his twentieth anniversary as a teacher in the Sunday School.

* * *

Emory University School of Medicine, Atlanta, Medical staff physician inspects City Hospital, Columbus. Dr. R. Bruce Logue, head of the department of cardiology, paid a visit to the hospital, October 19, as a part of a regular service Emory is rendering hospitals of the State. Under the plan, each month a professor of the Emory medical school will make ward rounds of city hospitals to help the hospital staff with the teaching of interns and resident physicians. After a tour of the wards, Dr. Logue was honored at a buffet supper at the hospital. Later he addressed physicians of the hospital staff.

Dr. J. A. Thrash, Columbus, executive director of City Hospital, said the hospital expects to obtain interns and resident physicians next June when the medical school year ends. At present the hospital has

three interns who have completed their internships and are being paid, as young physicians, to work at the hospital.

* * *

The Macon-Bibb County Health Department, Macon, recently held a Rehabilitation Clinic for persons with "arrested" cases of tuberculosis. Dr. R. Frank Cary, Macon, is the Macon-Bibb County health officer. The clinic was operated in cooperation with the above named health department, the Bibb County Tuberculosis Association and the Division of Vocational Rehabilitation of the Georgia Department of Public Health. Dr. Sam E. Patton, Macon tuberculosis specialist and president of the Bibb County Tuberculosis Association, said that the clinic served "a wonderful purpose, and the association is happy to have a part in cooperating with the clinic.

* * *

The Medical College of Georgia, Augusta, is one of the outstanding centers of the world in cancer research. Its recently created department of cytology where progress made in diagnosing cancer through the use of what is known as the Papanicolaou smear test has produced results that are being discussed at medical meetings all over the world. Research on what the physicians term as preinvasive cancer was started some years ago at the medical college by Dr. E. R. Pund who began a test program in which the Papanicolaou smear test was used in detecting cancer in its early stages. About four years ago Dr. Pund was joined in this work by Dr. Herbert E. Nieburgs, a native of Riga Latvia. The department of cytology at the medical college today has the distinction of having made the largest number of such tests on record in any one center and Augusta has the distinction of being the only place where these smear tests have been adopted as matter of routine in screening cases for cancer in the pre-invasive stage. The program has been written up in *The Journal of the American Medical Association* and Dr. Nieburgs has discussed it in medical meetings in Paris, London, Geneva and Zurich. It was also one of the featured subjects under discussion at the International Cancer Conference in Paris last year, at which Dr. Nieburgs was a participating member.

* * *

Dr. David Merren, Atlanta, announces the opening of his office at 53 Sixth Street, Atlanta. Practice limited to urology.

* * *

Dr. R. L. Carter and Dr. T. A. Sapington, Thomaston, announce the association of Dr. R. J. Mincey, Jr. at The Clinic, Thomaston. Dr. Mincey will limit his practice to obstetrics and gynecology.

* * *

The Medical Advisory Committee to Selective Service—State Committee: Dr. Carter Smith, chairman. Dr. A. O. Linch, vice-chairman. Dr. T. F. Sellers, Dr. C. W. Strickler, Jr., Dr. David Henry Poer, Dr. L. Minor Blackford, all of Atlanta. Dr. Steve A. Garrett, dentist, and Dr. Charles C. Rife, veterinarian, Atlanta.

* * *

Dr. Lucius Partillo Pharr, beloved Auburn and Barrow County physician and citizen, was honored on his 82nd birthday, November 10, 1950. "Dr. Pharr Day" was celebrated at Auburn on Sunday, November 12. A "Love Offering" was contributed by the many he has administered to during his more than fifty years of the practice of medicine, and presented him at the "open house" held at the Auburn school building. A "Dr. Pharr Baby Club" has been formed, and a register provided where each person who was brought into the world by Dr. Pharr may sign his or her name and make a contribution. The register will become a permanent record of the Dr. Pharr Babies, which number approximately 4,000. The "Love Offering"

will be used in some way to honor Dr. Pharr at the Barrow County Hospital.

* * *

The Polk County Health Department and the Public Welfare Department, Cedartown, announce the purchase of the Hackney home on Main Street to be used as a Health Center. Dr. John W. Good, Cedartown physician and a member of the health commissions, made the announcement.

* * *

Dr. John H. Ridley, Atlanta physician, recently spoke before the P.T.A. meeting at Canton, October 17. Dr. Ridley is one of 10 physicians who are giving their time to go over the state and speak on "Cancer." Dr. Ridley handles the subject most capably, giving information in an interesting way that will prove beneficial in this fight against cancer.

* * *

The Richmond County Medical Society held its meeting in Dugas Auditorium at the Medical College of Georgia, Augusta, October 19. Dr. Lloyd B. Greene, Philadelphia, associate professor of urology at the University of Pennsylvania School of Medicine, and a native of Augusta, was guest speaker. His subject was "The Role of the General Practitioner in the Management of Certain Urologic Conditions."

* * *

Dr. Paul L. Rieth and Dr. E. B. Dunlap, Jr., Atlanta, announce the opening of their offices at 207 Medical Arts Building, Atlanta. Practice limited to orthopedic surgery and fractures.

* * *

Dr. Geo. Roach, Atlanta, who is associated with Dr. Murdock Ecken of the Ponce de Leon Infirmary, is at the Harvard Medical School, Boston, Mass., where he is taking postgraduate work in the diseases of the ear, nose and throat.

* * *

The Southern Section of the United States Chapter of the International College of Surgeons will meet at the Biltmore Hotel, Atlanta, January 11, 12, and 13, 1951. No registration fee. The Faculty: Dr. Herbert Acuff, Knoxville; Dr. Henry E. Bacon, Philadelphia; Dr. Richard Cattell, Boston; Dr. Gilbert Douglas, Birmingham; Dr. Lawrence Fallis, Detroit; Dr. Merrill Foote, Brooklyn; Dr. William Hamm, Atlanta; Dr. D. P. Hall, Louisville; Dr. Claude Hunt, Kansas City; Dr. Arnold Jackson, Madison; Dr. Amos Koontz, Baltimore; Dr. Raymond McNealey, Chicago; Dr. Frank Neleney, New York; Dr. Karl Meyer, Chicago; Dr. Phillip Thorek, Chicago; Dr. Howard Trimpi, Philadelphia, and Dr. Exum Walker, Atlanta.

* * *

Dr. Alex B. Russell, Winder physician, is chairman of the state medical advisory committee of the newly formed Georgia Society for Crippled Children. The organizational meeting was held at the Henry Grady Hotel, Atlanta, October 17.

* * *

The Savannah Mental Hygiene Society held its first meeting in Savannah, October 10, to make plans for the fall and winter programs. One of the activities of the society is to arrange public meetings, with outstanding speakers on subjects concerning mental hygiene. Dr. A. H. Center and Dr. Harry E. Rollings, both of Savannah, are on the personnel of the educational committee. Dr. Clair A. Henderson, Savannah health commissioner, is a member of the committee to organize a state mental hygiene society.

* * *

Dr. H. C. Schenck, Atlanta, director of the Division of Tuberculosis Control, Georgia Department of Public Health, said, "Cases of tuberculosis found in Fulton and DeKalb counties during the Greater-Atlanta Health Program equal the maximum tuberculosis hospital facilities for the entire state." "The number of cases found in Fulton and DeKalb counties are significant in that

they reveal a real need for a greater and more intensive case-finding program and an expanded treatment program on the local level. Dr. Schenck suggested that the state could spend half of its annual cost of tuberculosis to put into effect controls that would, in a few years, reduce the cost of the disease to "a comparatively inconsequential sum." The Atlanta Health Testing Program found 896 woman and 752 men with tuberculosis. Eighty-one per cent of them were over 35 years old.

* * *

Dr. William Grover Skipper, a native of Lakeland, Fla., and recently connected with a hospital in Statesville, N. C., announces the opening of his office at Roherta for the practice of medicine.

* * *

Dr. Earl Atkinson Mayo, Jr., a native of Richland, announces the opening of his office for the practice of medicine at Richland. He graduated from Vanderbilt University School of Medicine, Nashville, Tenn., in 1945. He served his internship at the Baltimore City Hospital, Baltimore, Md. During World War II he served as a captain in the Medical Corps. For the past two years he has practiced medicine at Repton, Ala.

* * *

Dr. Coshly Swanson, Atlanta, announces the association of Dr. David L. Hearin in the practice of dermatology at 1017 Doctors Building, 478 Peachtree Street, N. E., Atlanta.

* * *

The United States Selective Service recently announced the medical draft had a total of 349 physicians, dentists and veterinarians registered in Georgia. Of the total, there were 219 physicians, 78 dentists and 52 veterinarians. Those required to register in the first call include only those who trained at government expense and who served less than 21 months in World War II and those deferred to complete their education. All physicians under 50 will be required to register in the next three months.

* * *

Dr. John B. Varner, Atlanta, announces the removal of his office from 1001 Medical Arts Building to 505 Doctors Building, 478 Peachtree Street, N. E., Atlanta. Practice limited to obstetrics and gynecology.

* * *

Dr. John H. Venable, Griffin, Spalding County Health Commissioner, recently sought public reaction to plans to cut down on tooth decay in the county. Dr. Venable said that his office has investigated a system which he says reduces decay from 30 to 40 per cent and is prepared to recommend it to the city if the public wants it. The system is fluorination of the city water supply which calls for adding a small amount of flourine to water just as chlorine is now added for safety. Dr. Venable said the system has been approved by the Spalding County Medical Society and the dentists.

* * *

The Veterans Administration Hospital (Lenwood), Augusta, medical staff training program guest speakers for October were: Dr. William L. Holt, Jr., Boston, chief medical officer for the Boston Psychopathic Hospital, who gave a series of two lectures entitled: "Electric Shock Therapy with Clinical Applications" and "Electric Coma Therapy and Non-convulsive Electric Stimulation Therapy." Dr. Paul Wilcox, Traverse City, Mich., research director at Traverse State Hospital, and secretary-treasurer of the Electro-Shock Research Association, gave a series of lectures and clinical demonstrations. Dr. Wilcox is one of this country's outstanding experts in the field of research in the treatment of those suffering from nervous and mental ailments. He presented material which is entirely new and far advanced in this field. Dr. Arthur L. Watkins, Boston, a member of the staff of the Massachusetts

General Hospital, also gave a series of two lectures. His subjects were "General Principles as Applied in the Application of Physical Medicine in a Neuropsychiatric Hospital," and "Boundaries of Physical Medicine." Dr. Leo R. Tige, Augusta, manager of the above named hospital invited the medical per-onnel to attend the lectures.

* * *

Dr. Jules Victor, Savannah physician, recently was guest speaker to the members of the Opti-Mrs. Club meeting held at the Brannon Lodge, Savannah. Dr. Victor stressed the need in Savannah for a modern 250-bed hospital. He pointed out that the Savannah present hospital facilities are not only antiquated to a degree, but are distressingly limited. He endorsed the plan to build a new institution as a memorial to World War II dead.

* * *

Dr. Edward M. West, Atlanta, resident physician at Crawford W. Long Memorial Hospital, recently spent a week attending the Interstate Postgraduate Medical Assembly held in Chicago.

* * *

Dr. T. V. Willis, Brunswick physician and surgeon, has accepted the position as chief surgeon and medical director of the Allegheny Memorial Hospital, Sparta, N. C. The new hospital is a 20-bed institution and is modern equipped in every detail. It is so constructed that it can be enlarged when there is demand for a larger hospital. Sparta is located in the mountains of North Carolina.

* * *

Dr. Mervin B. Wine, Thomasville physician, is a member of the Board of Directors of the Aidmore Children's Convalescent Hospital, Atlanta.

* * *

Dr. Steve Worthy, Carrollton physician and surgeon, was elected chief of staff and president of the Tanner Memorial Hospital medical staff at the staff's regular monthly meeting held October 9. Dr. Worthy succeeds Dr. D. S. Reese who served during the hospital's first year. Other officers are Dr. E. V. Patrick, vice-chief of staff and vice-president, and Dr. H. L. Barker, secretary and treasurer. Installation of the new officers took place November 2 only five days prior to the first anniversary of the first patient being admitted to the beautiful hospital. Three changes were made in the executive committee and two physicians were re-elected. Dr. Patrick was named to the medical services division, Dr. Thomas E. Reeve, Jr., to surgery and Dr. E. C. Bass to obstetrics and gynecology. Dr. O. E. Brannon was re-elected to head dental surgery, and Dr. R. L. Denney renamed head of the eye, ear, nose and throat division. Dr. S. E. Thomas remains medical advisory chairman for the colored ward.

* * *

The Fulton County Medical Society held its semi-monthly dinner meeting at the Academy of Medicine, Atlanta, November 16. Scientific meeting: Dr. Charles E. Holloway, moderator. "Rupture of the Pregnant Uterus," Dr. Eugene L. Griffin; "Prolapse of Gastric Mucosa into the Duodenum," Dr. A. Park McGinty.

* * *

Dr. T. C. Davison, Atlanta surgeon, addressed the American Chapter of the International College of Surgeons at the Cleveland, Ohio meeting November 1. His subject was "Thyroiditis." Dr. Davison is president of the American Goiter Association.

* * *

Dr. Sandy B. Carter, Atlanta physician, is a contributing editor to the new text book, "Therapeutics in Internal Medicine," edited by Dr. Franklin A. Kyser, associate in medicine, Northwestern University Medical School, Chicago, Ill.

* * *

Dr. William F. Friedewald, Atlanta physician, professor of Bacteriology and Immunization, and associate

professor of medicine, Emory University School of Medicine, has been awarded a \$13,176 grant by the National Cancer Institute, United States Public Health Service, for the study of viruses and tumors.

* * *

Dr. R. Bruce Logue, Atlanta, cardiologist at Emory University Hospital, recently wrote a paper entitled "Recent Advances in the Treatment of Congestive Heart Failure," which was published in the November, 1950 number of *The Journal of the Missouri State Medical Association*, under the section "Postgraduate Review."

* * *

Dr. Taylor S. Burgess, Atlanta, is taking a special course in laryngeal surgery at the Chevalier Jackson Clinic, Philadelphia.

* * *

Dr. R. Mitchell Sealey, Atlanta, is at the University of Michigan Hospital, Ann Arbor, Mich., where he is completing the requirements for residency for the American College of Surgeons.

* * *

Dr. Murl M. Hagood, Marietta physician, has received the highest accreditation accorded his profession. Dr. Hagood received his certification of membership in the American Chapter, International College of Surgeons at the Cleveland, Ohio, meeting, November 3. He is the only surgeon in Cobb County who has received the above named honor and one of the 60 surgeons in Georgia.

He also attended the American College of Surgeons annual session held in Boston, Mass., and while in Boston took a two-week postgraduate course in surgery at Harvard Medical School.

* * *

Dr. W. D. Hall, Calhoun physician, received the degree of Associate Fellow in the International College of Surgeons at the meeting held in Cleveland, Ohio, November 3. This recognition of his ability is the highest honor he has received.

* * *

Dr. Earle S. McKey, Jr., Valdosta physician, recently spent several weeks attending the American Academy of Ophthalmology and Otolaryngology held in Chicago.

* * *

Captain J. T. Rucker, Jr., Augusta, recently completed an internship at the University Hospital, Augusta, is now serving with the U. S. Army in Korea. Captain Rucker took part in the recent invasion of Inchon, Korea, with the Seventh Infantry Division.

* * *

Dr. Robert C. Major, Augusta surgeon, is now a Lieutenant Colonel in the U. S. Army. He is stationed at the Fitzsimmons General Hospital, Denver, Colo.

* * *

The Southern States Seminar on Chronic Diseases sponsored by the U. S. Public Health Service, Region VI, will be held in the Auditorium of the Academy of Medicine, 875 West Peachtree Street, N. E., Atlanta, January 13 and 14, 1951. The first session begins at 1:30 p.m., January 13. An interesting and helpful program has been arranged. For full information write Dr. F. V. Meriwether, Regional Medical Director, U. S. Public Health Service, 114 Marietta Street, Atlanta 3, Georgia.

* * *

Dr. I. Elizabeth Fletcher, a native of Statesboro, where she has practiced pediatrics since 1943, has accepted a position as school physician of the Fulton County Health Department, 160 Pryor Street, S. W., Atlanta. Dr. Fletcher graduated from the University of Georgia School of Medicine, Augusta, in 1939. After her internship at the University Hospital, Augusta, she served as assistant resident, resident and chief resident on pediatrics and during her service as chief resident was clinical instructor in pediatrics for the University of Georgia Medical School. Dr. Fletcher, who is a fellow of the American Medical Association, was certified by the American Board of Pediatrics in

1946. She is also a member of the Medical Association of Georgia, and Bulloch-Candler-Evans Medical Society of which she is the secretary-treasurer.

* * *

Dr. Donald R. McRae, Jr., a native of Augusta, announces the opening of his offices at 1345 Greene Street, Augusta, for the practice of surgery. Dr. McRae graduated from the University of Georgia School of Medicine, Augusta, in 1941. He spent 42 months in the Army Air Forces during World War II, and had 54 months training in surgery up until the time he received his surgery degree at the University Hospital in July of this year.

OBITUARY

Dr. William H. Holbrook, aged 75, retired Atlanta physician, died of injuries received when his automobile went over a 30-foot embankment near Pickens, S. C., died in a Pickens Hospital October 8, 1950. Dr. Holbrook graduated from Emory University School of Medicine, Atlanta, in 1898, and had practiced medicine in Atlanta for 35 years. For many years he was a member of Grace Methodist Church, and in later years he was a member of the Assembly of God Church at Ponce de Leon and Piedmont. He was a member of Alee Temple of the Shrine. Survivors include his wife, Mrs. Katherine M. Holbrook; two daughters, Mrs. R. L. Stringer and Mrs. W. C. Chalmers, both of Atlanta; three sons, Paul, Grady, and W. H. Holbrook, Jr., all of Atlanta, and two sisters. Funeral services were held at Spring Hill with the Rev. Ralph Byrd and the Rev. Jimmy Mayo officiating. Burial was in West View Cemetery, Atlanta.

* * *

Dr. Thomas Hiram Gaines, aged 73, veteran Elberton and Elbert County physician, died in the Anderson Memorial Hospital, Anderson, S. C., October 13, 1950. Dr. Gaines was the son of the late P. C. and Mary Alexander Gaines, and spent his entire life in Elbert County. He graduated from the Chattanooga Medical College, Chattanooga, Tenn., in 1903. He was a member of the Ruckersville Methodist Church. He had practiced medicine in Elbert County since 1903 and continued in active practice until recent months when ill health forced him to retire. Survivors include one son, Thomas H. Gaines, Jr., Decatur, and one daughter, Mrs. Roy G. Grubbs, Elbert County; two brothers and a sister. Funeral services were held at the Ruckersville Methodist Church with the Rev. R. H. Peterson and the Rev. Thomas H. Wheelis officiating. Burial was in the churchyard.

* * *

Dr. Homer D. Liles, aged 61, widely known physician of Flowery Branch, died in the Hall County Hospital, Gainesville, October 20, 1950. He graduated from the Georgia College of Eclectic Medicine and Surgery, Atlanta, in 1913. He was a veteran of World War I. Dr. Liles was a member of the Flowery Branch Baptist Church, the American Legion, and the Disabled American Veterans. Born in Hall County, Dr. Liles had practiced medicine in the county for 37 years. Survivors include four brothers, J. A. and G. P. Liles, both of Birmingham, Ala.; H. S. Liles, Atlanta, and C. H. Liles, Avondale Estates; two sisters, Mrs. J. C. O'Dell, Gainesville, and Mrs. W. P. Thompson, Avondale Estates. Funeral services were held at Hubert Vickers Chapel, with the Rev. Sam Jones, and the Rev. G. L. Roper officiating. Burial was in the Pleasant Hill Cemetery, Flowery Branch.

* * *

Dr. E. C. Ripley, aged 81, retired physician, of 1235 Clairmont Avenue, Decatur, died October 25, 1950. Dr. Ripley was a pioneer Atlantan, a son of the late Thomas R. and Laura Conner Ripley, early Atlanta settlers. He graduated from the Atlanta School of Medicine, now Emory University School of Medicine,

(Continued from Page 556)

WOMAN'S AUXILIARY TO THE MEDICAL ASSOCIATION OF GEORGIA 1950-1951

PRESIDENT'S MESSAGE

Greetings to every doctor in Georgia and to every member of the Woman's Auxiliary to the Medical Association of Georgia. To all members of the Medical Association I urge you to have your wife become a member of "our auxiliary", if she has not already joined.

Our theme for 1950-1951, is, *Plan—Cooperate—Progress*.

Let us plan study groups, so that we will be better informed on all of the aims of our auxiliary. Remember we as doctors' wives can contribute much to our doctor-husbands and their profession in the field of Public Relations, by being informed ourselves on current legislation and becoming acquainted with the health and welfare agencies in our community.

Let us cooperate with all the auxiliary in our State, especially in our own district.

This year, our aim will be one or more newly organized counties in every district and an increase in membership in every auxiliary.

Let us work together and serve the medical profession to the best of our ability. We will always live up to our name, Auxiliary, "That which helps".

My best wishes to each of you for a very successful year in all of your auxiliary activities.

MARTHA WILLIAMS, President
(Mrs. Lehman W. Williams)

ADVISORY COMMITTEE

Dr. Murdock Eguen, Atlanta, *Chairman*
Dr. Lehman W. Williams, Savannah
Dr. J. R. S. Mays, Macon
Dr. Eustace A. Allen, Atlanta
Dr. W. Bruce Schaefer, Toccoa
Dr. Ralph H. Chaney, Augusta
Dr. W. L. Bazemore, Macon
Dr. J. Harry Rogers, Atlanta
Dr. W. G. Elliott, Cuthbert

HONORARY PRESIDENTS FOR LIFE

Mrs. James N. Brawner, Sr., 2800 Peachtree Road, N. E., Atlanta (named at 1939 convention)
Mrs. Eustace A. Allen, 18 Collier Road, N. W., Atlanta (named at 1949 convention)

EXECUTIVE BOARD

Past Presidents

Mrs. James N. Brawner, Sr., 2800 Peachtree Road, N. E., Atlanta
Mrs. William H. Meyers, 402 Drayton St., Savannah
Mrs. C. W. Roberts, 3250 Ridgewood Rd., N. W., Atlanta
Mrs. J. C. Moore (moved out of State)
Mrs. C. C. Hinton, 2514 Forsyth Road, Macon
Mrs. Marion T. Benson, Sr., 36 Sheridan Dr., N. E., Atlanta
Mrs. C. C. Harrold, 350 Orange St., Macon
Mrs. Ralston Lattimore, 109 E. 52nd St., Savannah
Mrs. S. T. R. Revell, Louisville
Mrs. J. Bonar White, Atlanta (deceased)
Mrs. J. E. Penland, 912 Elizabeth St., Waycross
Mrs. E. R. Harris, Winder
Mrs. William R. Dancy, 303 E. Gaston St., Savannah
Mrs. Ralph Chaney, Bransford Rd., Augusta
Mrs. Warren A. Coleman, Eastman
Mrs. Eustace A. Allen, 18 Collier Rd., N. W., Atlanta
Mrs. H. G. Bannister, Ila

Mrs. Lee Howard, 625 East 44th St., Savannah
Mrs. J. Long King, 283 Buford Place, Macon
Mrs. Olin S. Cofer, 948 Lullwater Rd., N. E., Atlanta
Mrs. Wm. T. Randolph, Winder
Mrs. Bruce Schaefer, 110 East Whitman St., Toccoa
Mrs. W. G. Elliott, 1010 Lumpkin St., Cuthbert
Mrs. Sam Anderson, 36 Sheridan Dr., N. E., Atlanta
Mrs. J. Harry Rogers, 699 E. Paces Ferry Road, N. E., Atlanta

OFFICERS

President—Mrs. Lehman W. Williams, 135 East 45th St., Savannah
President-Elect, Chairman Organization—Mrs. J. R. S. Mays, 2587 Elizabeth St., Macon
First Vice-President, Chairman Program—Mrs. Ralph Fowler, 303 McDonald St., Marietta
Second Vice-President, Chairman Today's Health—Mrs. John W. Turner, 3935 Vermont Rd., N. E., Atlanta
Third Vice-President, Scrapbook Chairman—Mrs. Paul T. Russell, 513 N. Cleveland Dr., Albany
Recording Secretary—Mrs. Leo Smith, St. Mary's Drive, Waycross
Corresponding Secretary—Mrs. C. R. A. Redmond, 113 Henry Ave., Savannah
Treasurer—Mrs. Robert C. Major, Magnolia Dr., Forrest Hills, Augusta
Historian—Mrs. Robert Crichton, Milledgeville State Hospital, Milledgeville
Parliamentarian—Mrs. W. Bruce Schaefer, 110 East Franklin, Toccoa

Chairmen of Standing Committees

Achievement Award—Mrs. William H. Benson, Burnt Hickory Rd., Marietta
Archives—Mrs. C. W. Roberts, 3250 Ridgewood Rd., N. W., Atlanta

Budget—Mrs. Ralph H. Chaney, Bransford Rd., Augusta
Bulletin—Mrs. Milford B. Hatcher, 274 Jackson Spring Rd., Macon
Doctor's Day—Mrs. Virgil Williams, Griffin
Editorial—Mrs. Ben Hill Clifton, 1893 Wycliff Rd., N. W., Atlanta
Mrs. J. Bonar White Exhibit and Scrapbook Awards—Mrs. R. E. Jones, 1014 Love Ave., Tifton
Legislation—Mrs. Harold Smith, 4 Henry Ave., Savannah
Public Relations—Mrs. J. Harry Rogers, 699 E. Paces Ferry Rd., N. E., Atlanta
Research in Romance of Medicine—Mrs. T. J. Ferrell, 1521 St. Mary's Dr., Waycross
Revisions—Mrs. Lee Howard, 625 E. 44th St., Savannah
Student Loan Fund—Mrs. Shelley C. Davis, 1259 Peachtree Battle Ave., N. W., Atlanta
Trophy—Mrs. James N. Brawner, Sr., Mrs. J. Harry Rogers, 699 E. Paces Ferry Rd., N. E., Atlanta
Special Committee Camellia Garden—Mrs. R. W. Bradford, Milledgeville State Hospital, Milledgeville

FIRST DISTRICT

Manager: Mrs. T. A. Peterson, Savannah

Bullock-Candler-Evans Counties

President, Mrs. J. L. Nevil, Metter
Daniel, Mrs. Bird, Statesboro
Deal, Mrs. B. A., Statesboro
Floyd, Mrs. W. E., Claxton
Griffin, Mrs. Louie, Claxton
Hames, Mrs. Curtis, Claxton
Kennedy, Mrs. R. L., Metter
McElveen, Mrs. J. M., Brooklet
Mooney, Mrs. John, Jr., Statesboro
Nevil, Mrs. J. L., Metter
Olliff, Mrs. H. H., Register
Simmons, Mrs. W. E., Metter

Burke-Jenkins-Screven Counties

President, Mrs. Cleveland Thompson, Waynesboro
Barger, Mrs. Everette, Waynesboro

Byne, Mrs. J. M., Jr., Waynesboro
 Green, Mrs. C. G., Waynesboro
 Illis, Mrs. W. W., Sardis
 Lee, Mrs. H. G., Millen
 McCarver, Mrs. W. C., Vidette
 Mulkey, Mrs. A. P., Millen
 Minkey, Mrs. Q. A., Millen
 Simmons, Mrs. W. G., Sylvania
 Thompson, Mrs. Cleveland, Waynesboro

Chatham County

President, Mrs. S. F. Rosen, Savannah
 Baker, Mrs. J. O., 126 East Oglethorpe Ave., Savannah
 Barrow, Mrs. Craig, Wormsloe, Savannah
 Bedingfield, Mrs. W. O., 19 East 46th St., Savannah
 Broderick, Mrs. J. R., 37 East 49th St., Savannah
 Brown, Mrs. C. T., Guyton
 Brown, Mrs. F. B., 17 East 52nd St., Savannah
 Brown, Mrs. W. E., 139 East Victory Dr., Savannah
 Center, Mrs. A. H., 507 East 48th St., Savannah
 Chisholm, Mrs. J. F., 201 East Gaston St., Savannah
 Cluxton, Mrs. Harley, 29 Chelsea Dr., Savannah
 Cluxton, Mrs. Hayes, 2225 East Victory Dr., Savannah
 Cook, Mrs. E. R., 513 Whitaker St., Savannah
 Coward, Mrs. A. W., 1221 East 49th St., Savannah
 Craig, Mrs. J. B., 528 East 45th St., Savannah
 Crawford, Mrs. W. B., Jr., 2608 Atlantic Ave., Savannah
 Dancy, Mrs. W. R., 308 East Gaston St., Savannah
 Demmond, Mrs. E. C., 1001 East Victory Dr., Savannah
 Drane, Mrs. Robert, 204 East Hall St., Savannah
 Elliott, Mrs. J. L., 210 East Huntingdon St., Savannah
 Faggart, Mrs. G. H., 18 West Oglethorpe Ave., Savannah
 Fillingim, Mrs. D. B., 716 East 52nd St., Savannah
 Frech, Mrs. H. C., 516 East 53rd St., Savannah
 Freedman, Mrs. L. M., 140 East 44th St., Savannah
 Fulmer, Mrs. W. H., 38 East 52nd St., Savannah
 Gleaton, Mrs. E. N., 32 East 45th St., Savannah
 Goldenstar, Mrs. G. W., Wymberly, Savannah
 Gottschalk, Mrs. R. B., 437 East 59th St., Savannah
 Graham, Mrs. R. E., 417 East 54th St., Savannah
 Ham, Mrs. Emerson, 2130 East 43rd St., Savannah
 Henderson, Mrs. C. A., 1117 East 48th St., Savannah
 Holloman, Mrs. A. L., 27 East 34th St., Savannah
 Holton, Mrs. C. F., 606 East 45th St., Savannah
 Howard, Mrs. Lee, Sr., 625 East 44th St., Savannah
 Howard, Mrs. Lee, Jr., 626 East 52nd St., Savannah
 Iseman, Mrs. Everette, 302 East 46th St., Savannah

Kandel, Mrs. H. M., 432 Abercorn St., Savannah
 Kanter, Mrs. W. W., 502 East 57th St., Savannah
 King, Mrs. Ruskin, 10 West Taylor St., Savannah
 Lang, Mrs. G. H., 2301 Atlantic Ave., Savannah
 Lange, Mrs. S. J., 11 Oleander St., Savannah
 Lattimore, Mrs. Ralston, 103 East 52nd St., Savannah
 Lee, Mrs. Lawrence, Sr., 527 East 44th St., Savannah
 Lee, Mrs. Lawrence, Jr., 122 Abercorn St., Savannah
 Levington, Mrs. H. L., 209 East Gaston St., Savannah
 Lott, Mrs. Oscar, 320 East 54th St., Savannah
 Lynn, Mrs. S. C., 2 East 45th St., Savannah
 McGee, Mrs. H. H., 7 West Gordon St., Savannah
 McGoldrick, Mrs. T. A., Jr., 417 East 45th St., Savannah
 Maner, Mrs. E. N., 101 East 45th St., Savannah
 Metts, Mrs. J. C., 303 Anderson Ave., Savannah
 Miller, Mrs. B. E., Court Apartments, Savannah
 Morrison, Mrs. H. J., 20 East Gaston St., Savannah
 Norton, Mrs. W. A., 105 East Oglethorpe Ave., Savannah
 Oliver, Mrs. R. L., 1133 Washington Ave., Savannah
 Olmstead, Mrs. G. T., 333 45th St., Savannah
 Osborne, Mrs. E. S., 7 Edgewood Ave., Savannah
 Osborne, Mrs. W. W., 2112 Lincoln St., Savannah
 Osteen, Mrs. W. L., 610 Anderson Ave., Savannah
 Pacifici, Mrs. Joseph, 40 East 50th St., Savannah
 Peterson, Mrs. T. A., 719 East 56th St., Savannah
 Pinholster, Mrs. J. H., 421 East 44th St., Savannah
 Porter, Mrs. J. E., 501 East 53rd St., Savannah
 Portman, Mrs. H. J., 627 East 51st St., Savannah
 Powers, Mrs. L. K., 623 East 54th St., Savannah
 Prince, Mrs. C. L., 519 East 45th St., Savannah
 Quattlebaum, Mrs. J. K., 203 East 45th St., Savannah
 Rabhan, Mrs. L. J., 201 East 52nd St., Savannah
 Redmond, Mrs. C. G., 701 Whitaker St., Savannah
 Redmond, Mrs. C. R. A., 113 Henry Ave., Savannah
 Righton, Mrs. H. Y., 401 East 45th St., Savannah
 Robinson, Mrs. David, 218 East 55th St., Savannah
 Rollings, Mrs. H. E., 120 East Gaston St., Savannah
 Rosen, Mrs. E. F., 620 East 54th St., Savannah
 Rosen, Mrs. S. F., 1512 East Henry St., Savannah
 Rubin, Mrs. Jacob, 727 East 44th St., Savannah

Sax, Mrs. C. E., 511 East 53rd St., Savannah
 Schley, Mrs. R. L., Jr., 114 West Gaston St., Savannah
 Schneider, Mrs. M. M., 401 East 50th St., Savannah
 Sharpley, Mrs. John, 1127 Washington Ave., Savannah
 Sharpley, Mrs. H. F., Jr., 215 Anderson Ave., Savannah
 Shaw, Mrs. L. W., Isle of Hope, Savannah
 Smith, Mrs. Harold, 4 Henry Ave., Savannah
 Smith, Mrs. P. H., 820 Maupas Ave., Savannah
 Stalvey, Mrs. J. K., 1331 East 48th St., Savannah
 Straight, Mrs. G. W., 424 East 50th St., Savannah
 Touchton, Mrs. G. L., Forsythe Apartments, Savannah
 Train, Mrs. J. K., 1111 Bull St., Savannah
 Train, Mrs. J. K., Jr., 701 East 44th St., Savannah
 Upson, Mrs. E. T., 37 East 45th St., Savannah
 Usher, Mrs. Charles, 6 East Liberty St., Savannah
 Victor, Mrs. Jules, Jr., 10 Chelsea Dr., Savannah
 Waring, Mrs. A. J., Sr., 133 Washington Ave., Savannah
 Watkins, Mrs. Lee C., 421 Abercorn St., Savannah
 Westerfield, Mrs. C. W., 101 Garrard Ave., Savannah
 Williams, Mrs. A. F., 622 52nd St., Savannah
 Williams, Mrs. L. W., 135 East 45th St., Savannah
 Wilson, Mrs. W. D., 911 Whitaker St., Savannah
 *Bassett, Mrs. V. H., 1010 East Park Ave., Savannah
 *Daniels, Mrs. J. W., Sr., 24 East 31st St., Savannah
 *Johnson, Mrs. J. Hugo, Sr., 116 East Oglethorpe Ave., Savannah
 *Martin, Mrs. R. V., 18 East 31st St., Savannah
 *McCarthy, Mrs. Dan, 320 East 39th St., Savannah
 *Morrison, Mrs. A. A., 1702 Bull St., Savannah

SECOND DISTRICT

Manager: Mrs. Richard Winston, Tifton

Colquitt County

President, Mrs. R. E. Fokes, Moultrie
 Baggs, Mrs. W. H., Jr., 515 5th Ave., S. E., Moultrie
 Brannen, Mrs. Cecil, 1224 1st St., S. E., Moultrie
 Conger, Mrs. P. D., 1207 S. Main St., Moultrie
 Fike, Mrs. R. H., 1209 9th St., S. W., Moultrie
 Fokes, Mrs. R. E., Jr., 221 2nd St., S. W., Moultrie
 Funderburk, Mrs. A. G., 803 1st St., S. E., Moultrie
 Holmes, Mrs. E. C., Moultrie
 Gay, Mrs. Frank M., 216 Hillcrest, Moultrie
 Joiner, Mrs. R. M., 918 3rd St., S. W., Moultrie

McCoy, Mrs. John F., 103 9th Ave., S. E., Moultrie
 McLeod, Mrs. J. W., 1184 4th St., S. W., Moultrie
 McGinty, Mrs. W. R., 111 1st St., S. W., Moultrie
 Paulk, Mrs. James R., 1103 1st St., S. E., Moultrie
 Stegall, Mrs. Robert, 403 S. Main, Moultrie
 Woodall, Mrs. J. B., 606 1st St., S. E., Moultrie

Dougherty County

President, Mrs. Mack Sutton, Albany
 Armstrong, Mrs. E. S., 1311 4th Ave., Albany
 Barnett, Mrs. J. M., 527 Pine Ave., Albany
 Berg, Mrs. J. L., 305 N. Jefferson St., Albany
 Bowman, Mrs. M. B., 1112 N. Madison St., Albany
 Brown, Mrs. C. M., 917 First Ave., Albany
 Buckner, Mrs. F. W., 615 Third Ave., Albany
 Cook, Mrs. W. S., 312 Flint Ave., Albany
 Dunn, Mrs. C. S., 1142 Julia St., Albany
 Hilsman, Mrs. P. L., 1612 Maryland Dr., Albany
 Holman, Mrs. C. M., 1005 McKinley Dr., Albany
 Irvin, Mrs. I. W., 1207 N. Madison St., Albany
 James, Mrs. A. E., 1010 First St., Albany
 Keaton, Mrs. J. C., 526 Pine Ave., Albany
 Lucas, Mrs. I. M., 910 N. Madison St., Albany
 Mann, Mrs. D. S., 306 S. Cleveland Dr., Albany
 McCall, Mrs. C. S., 929 Residence St., Albany
 McDaniel, Mrs. J. Z., 709 N. Jefferson St., Albany
 McKemie, Mrs. H. M., 1201 N. Davis St., Albany
 McKemie, Mrs. W. F., 1011 N. Monroe St., Albany
 Neill, Mrs. F. K., 1112 N. Davis St., Albany
 Parrish, Mrs. L. H., 706 N. Monroe St., Albany
 Redfearn, Mrs. J. A., 527 Broad Ave., Albany
 Rhyne, Mrs. W. P., 631 Fifth Ave., Albany
 Roberson, Mrs. P. E., 1208 N. Madison Ave., Albany
 Russell, Mrs. P. T., 513 N. Slappey Dr., Albany
 Seymour, Mrs. G. E., 702 N. Slappey Dr., Albany
 Sutton, Mrs. Mack, Dolly Madison Apts., Albany
 Tye, Mrs. J. P., 413 Fourth Ave., Albany
 Wolfe, Mrs. D. M., 1009 McKinley Dr., Albany

Tift County

President, Mrs. Richard K. Winston, Tifton
 Andrews, Mrs. Agnew, 1205 Murray Ave., Tifton
 Andrews, Mrs. John S., 18th St., Tifton

Edmondson, Mrs. Tom L., 603 Wilson Ave., Tifton
 Evans, Mrs. E. L., 18th St., Tifton
 Fleming, Mrs. Carlton A., 1008 Hall Ave., Tifton
 Flowers, Mrs. E. M., Hall Ave., Tifton
 Harrell, Mrs. D. B., 418 N. Central, Tifton
 Jones, Mrs. R. E., 1014 Love Ave., Tifton
 Lucas, Mrs. Paul W., Amy Apts., Tifton
 Pickett, Mrs. F. B., Ty Ty
 Pittman, Mrs. C. S., Sr., 211 12th St., Tifton
 Pittman, Mrs. C. S., Jr., 18th St., Tifton
 Smith, Mrs. W. T., 405 N. Park, Tifton
 Webb, Mrs. M. L., Love Ave., Tifton
 Winston, Mrs. Richard K., 807 Wilson Ave., Tifton
 Zimmerman, Mrs. Charles E., 503 16th St., Tifton
 Zimmerman, Mrs. W. F., 617 Wilson Ave., Tifton
 Jones, Mrs. R. E., Tifton, Deceased

THIRD DISTRICT

Manager, Mrs. A. R. Sims, Richland
Houston-Peach Counties
 President, Mrs. J. L. Gallemore, Perry
 Gallemore, Mrs. J. L., Swift St., Perry
 Hendrick, Mrs. Alford G., Swift St., Perry

Muscogee County

President, Mrs. James A. Elkins, Columbus
 Berman, Mrs. Dave., 1354 Virginia Ave., Columbus
 Berry, Mrs. Arthur N., 1660 Flournoy Dr., Columbus
 Bickerstaff, Mrs. Hugh J., Country Club Apt., Columbus
 Blackmar, Mrs. F. B., 1243 Forest Ave., Columbus
 Blanchard, Mrs. Mercer C., 891 Peachtree St., Columbus
 Blanchard, Mrs. Mercer, 1543 Eberhart Ave., Columbus
 Brannon, Mrs. O. C., 1318 Stark Ave., Columbus
 Boyter, Mrs. Henry H., 1425 Peacock, Columbus
 Butler, Mrs. Clarence C., 2004 Thirteenth St., Columbus
 Bush, Mrs. John, 1600 Sixteenth Ave., Columbus
 Chipman, Mrs. R. A., 1234 Peacock Ave., Columbus
 Cook, Mrs. Wm. C., 926 Peachtree Dr., Columbus
 Cooke, Mrs. W. L., 2110 Oak Ave., Columbus
 Comstock, Mrs. George, 2250 Amos St., Columbus
 Conner, Mrs. George R., 1816 Wildwood Ave., Columbus
 Curtiss, Mrs. E. J., Country Club Apts., Columbus
 Dillard, Mrs. Guy J., 1919 Flournoy Dr., Columbus
 Dupree, Mrs. J. W., Jr., 2424 7th St., Columbus
 Durden, Mrs. John, Wynnton Rd., Columbus
 Dykes, Mrs. A. N., 1617 Summit Dr., Columbus

Elder, Mrs. Ivan R., 1551 18th Ave., Columbus
 Elkins, Mrs. James A., 1159 Tate Dr., Columbus
 Edwards, Mrs. Franklin D., Dinglewood, Columbus
 Fletcher, Mrs. H. Quigg, 600 Peachtree Dr., Columbus
 Gibson, Mrs. Roy L., 2021 Wells Dr., Columbus
 Gilliam, Mrs. O. D., 1715 Carter Pl., Columbus
 Graffagnino, Mrs. P. C., 1541 Dixon Dr., Columbus
 Henderson, Mrs. C. W., 1602 Forest Ave., Columbus
 Hughston, Mrs. Jack, 2009 Cherokee Dr., Columbus
 Hutto, Mrs. G. M., 2004 13th St., Columbus
 Jenkins, Mrs. Wm. F., 1636 Dixon Dr., Columbus
 Jones, Mrs. W. R., 2408 Eighteenth Ave., Columbus
 Jordan, Mrs. Willis P., Jr., 1231 Peacock Ave., Columbus
 Land, Mrs. Polk S., 161 Richards St., Columbus
 Lapides, Mrs. Leon, Green Island Hills, Columbus
 Mayher, Mrs. John W., Plumfield, Columbus
 Mayher, Mrs. Will E., 1112 Dinglewood, Columbus
 Monaco, Mrs. Ralph, Peacock Ave., Columbus
 Murray, Mrs. George S., 1427 Dinglewood, Columbus
 McDuffie, Mrs. James H., 1304 E. Tenth St., Columbus
 Peacock, Mrs. Clifford A., 1266 Cedar Ave., Columbus
 Roberts, Mrs. Luther J., 1704 Wells Dr., Columbus
 Schley, Mrs. Frank B., 1352 Peacock Ave., Columbus
 Smith, Mrs. Charles, 2127 Hillside Dr., Columbus
 Snelling, Mrs. W. R., 1101 Britt Ave., Columbus
 Stapleton, Mrs. J. L., 2861 Seventeenth Ave., Columbus
 Storey, Mrs. W. Edward, 3387 Macon Rd., Columbus
 Tatum, Mrs. P. A., 1220 16th Ave., Columbus
 Tillery, Mrs. Bert, 1544 Cherokee Ave., Columbus
 Thompson, Mrs. John B., 1603 Wynnnton Rd., Columbus
 Threatte, Mrs. Bruce, 1900 Dimon Circle, Columbus
 Thrash, Mrs. J. A., 1314 Sixteenth St., Columbus
 Turner, Mrs. Haywood, 1611 22nd St., Columbus
 Venable, Mrs. D. R., 1710 Wildwood, Columbus
 Walker, Mrs. John E., Green Island Hills, Columbus
 Waller, Mrs. Roy M., 1307 35th St., Columbus
 Willis, Mrs. J. N., 1240 Cedar Ave., Columbus
 Winn, Mrs. John H., 935 Blanchard Ave., Columbus
 Wolff, Mrs. Luther H., 1818 Slade Dr., Columbus
 Youmans, Mrs. J. R., 1600 Boulevard, Columbus

Deceased: Mrs. Willis P. Jordan, Sr.,
1256 Peacock Ave.

**Ocmulgee Society
(Dodge-Bleckley-Pulaski
Counties)**

President, Mrs. James L. Thomson,
Eastman

Arnold, Mrs. M. F., Jr., Hawkins-
ville

Baker, Mrs. W. R., Hawkinsville

Batts, Mrs. A. S., Hawkinsville

Bush, Mrs. A. R., Hawkinsville

Coleman, Mrs. W. A., Eastman

Holder, Mrs. Frank, Eastman

Jones, Mrs. E. C., Eastman

Long, Mrs. H. W., Eastman

Mayo, Mrs. J. P., Eastman

Smith, Mrs. A. L., Cochran

Smith, Mrs. E. L., Eastman

Smith, Mrs. R. L., Cochran

Thomson, Mrs. James L., Eastman

Whipple, Mrs. R. L., Cochran

**Randolph-Terrell-Webster-
Clay-Stewart Counties**

President, Mrs. T. F. Harper, Cole-
man

Arnold, Mrs. J. T., Parrott

Crook, Mrs. W. W., Cuthbert

Daniel, Mrs. Ernest F., Dawson

Elliott, Mrs. W. G., Cuthbert

Gary, Mrs. Loren, Georgetown

Goss, Mrs. Woodrow, Ashburn

Harper, Mrs. T. F., Coleman

Kenyon, Mrs. S. P., Dawson

Martin, Mrs. F. M., Shellman

Martin, Mrs. R. B., III, Cuthbert

Patterson, Mrs. J. C., Cuthbert

Rogers, Mrs. F. S., Coleman

Sims, Mrs. A. R., Richland

Tidmore, Mrs. J. C., Dawson

Sumter County

President, Mrs. William McMath,
Americus

Boyette, Mrs. L. S., Ellaville

Collins, Mrs. Robert A., Jr., Monte-
zuma

Durham, Mrs. Bon M., 218 Taylor
St., Americus

Fenn, Mrs. Henry R., 214 Taylor
St., Americus

Gatewood, Mrs. Schley, 102 Hancock
Dr., Americus

Logan, Mrs. Colquitt, Plains

McMath, Mrs. Wm., Hancock Dr.,
Americus

Pendergrass, Mrs. R. C., 144 Taylor
St., Americus

Primrose, Mrs. A. C., 801 Hancock
Dr., Americus

Robinson, Mrs. John, 1022 Hancock
Dr., Americus

Smith, Mrs. Herschel, 601 S. Lee
St., Americus

Savage, Mrs. Carl, Montezuma

Thomas, Mrs. Russell, Leslie Rd.,
Americus

Wilson, Mrs. Frank, Leslie

Wood, Mrs. Kenneth, Leslie

FOURTH DISTRICT

**Carroll-Douglas-Haralson
Counties**

President, Mrs. C. V. Van Sant,
Douglasville

Barker, Mrs. Homer Lumpkin, 15
Spring St., Carrollton

Bass, Mrs. E. C., 17 South St., Car-
rollton

Berry, Mrs. Robert L., Citron St.,
Villa Rica

Denney, Mrs. Roy Lumpkin, 14 Col-
lege St., Carrollton

Downey, Mrs. William Perrin, 11 E.
Mill St., Tallapoosa

Holtz, Mrs. Louis, 29 Reese St.,
Carrollton

Morgan, Mrs. Floyd W., 75 Church
St., Douglasville

Parham, Mrs. John B., Alewine Ave.,
Tallapoosa

Patrick, Mrs. E. A., 9 South St.,
Carrollton

Powell, Mrs. John E., Sr., Cemetery
St., Villa Rica

Reese, Mrs. Davis Stephens, 49 Dixie
St., Carrollton

Reeve, Mrs. Thomas E., Jr., Griffin
Dr., Carrollton

Scales, Mrs. Seaborn F., P. O. Box
304, Carrollton

Smith, Mrs. William Posie, College
St., Bowdon

Thomasson, Mrs. Wm. Edward, 16
Maple St., Carrollton

Van Sant, Mrs. C. V., 133 Broad
St., Douglasville

Watts, Mrs. James Wyly, College St.,
Bowdon

Worthy, Mrs. W. Steve, 39 West Ave.,
Carrollton

Associate Members

Gilmore, Mrs. E. L., Tallapoosa

Powell, Mrs. B. C., Villa Rica

Troup County

President, Mrs. Evan W. Molyneaux,
Hogansville

Arnold, Mrs. E. T., Jr., Hogansville

Avery, Mrs. R. M., West Point Rd.,
LaGrange

Avery, Mrs. Wm. G., West Point
Rd., LaGrange

Callaway, Mrs. Enoch, 310 Broad St.,
LaGrange

Chambers, Mrs. James W., 226 Mc-
Lendon Ave., LaGrange

Clark, Mrs. W. H., 1401 Vernon Rd.,
LaGrange

Cewart, Mrs. Charles T., 401 Ridley
Ave., LaGrange

Felder, Mrs. Richard E., 510 Sylvan
Rd., LaGrange

Foster, Mrs. Henry A., 729 N. Green-
wood St., LaGrange

Freeman, Mrs. Thos. N., Jr., 107
Bacon St., LaGrange

Grace, Mrs. Kenneth D., 512 Park
Ave., LaGrange

Grady, Mrs. Henry W., 1400 Vernon
Rd., LaGrange

Hadaway, Mrs. W. H., 1307 Vernon
Rd., LaGrange

Hammitt, Mrs. H. H., Sr., 201 Gor-
don St., LaGrange

Hammitt, Mrs. H. H., Jr., 401 Ridley
Ave., LaGrange

Hand, Mrs. B. Hollis, Country Club
Rd., LaGrange

Hendricks, Mrs. Willis M., 512 Syl-
van Rd., LaGrange

Herault, Mrs. Pierre C., 600 Winzor
Ave., LaGrange

Holder, Mrs. J. S., 1402 Vernon Rd.,
LaGrange

Hutchinson, Mrs. Wm. Lane, 306
Ben Hill St., LaGrange

Jones, Mrs. H. T., West Point

Kafka, Mrs. Joseph, College Ave.,
LaGrange

Lane, Mrs. J. E., 400 Gordon St.,
LaGrange

Lewis, Mrs. James W., 700 Hill St.,
LaGrange

McCall, Mrs. W. R., 409 Hill St.,
LaGrange

Molyneaux, Mrs. Evan W., Hogans-
ville

Morgan, Mrs. D. E., 618 Broad St.,
LaGrange

Norman, Mrs. Lewis G., Jr., West
Point

O'Neal, Mrs. R. S., 301 Gordon St.,
LaGrange

Phillips, Mrs. W. P., 1003 Broad St.,
LaGrange

Whitehead, Mrs. C. Mark, 103 Col-
lege Ave., LaGrange

Williams, Mrs. C. O., West Point

Upson County

President, Mrs. R. E. Dallas, Thom-
aston

Adams, Mrs. B. C., Thomaston

Carter, Mrs. R. L., Box 47, Thom-
aston

Dallas, Mrs. R. E., Thomaston

Gower, Mrs. W. J., Thomaston

Head, Mrs. Douglas, Jr., Thomaston

Kellum, Mrs. Morgan, Third St.,
Thomaston

Sappington, Mrs. T. A., Canton
Pines, Thomaston

Tyler, Mrs. Herbert D., 507 Hill St.,
Thomaston

FIFTH DISTRICT

Manager: Mrs. Murdock Euen, At-
lanta

DeKalb County

President, Mrs. W. A. Mendenhall,
Chamblee

Ansley, Mrs. Robert B., 212 S. Can-
dler, Decatur

Beck, Mrs. John Edwin, 144 Pine-
crest Ave., Decatur

Bloomer, Mrs. Wm. E., 252 Mt. Ver-
non Dr., Decatur

Cunningham, Mrs. C. E., 350 S. Can-
dler, Decatur

Duncan, Mrs. G. A., 714 S. Candler,
Decatur

Evans, Mrs. J. R., Stone Mountain

Kerr, Mrs. W. K., Peachtree Road,
Chamblee

Lee, Mrs. Howard B., 2840 Sanford
Rd., Decatur

Leslie, Mrs. John T., 48 Dartmouth
Ave., Avondale Estates

Litton, Mrs. J. H., Tucker

Matthews, Mrs. Lawrence P., 2388
Westminister Way, N. E., Atlanta

Matthews, Mrs. W. A., 4100 Peach-
tree Rd., Atlanta

McCurdy, Mrs. Willis, Stone Moun-
tain

McGeachy, Mrs. T. E., 429 Adams
St., Decatur

Mendenhall, Mrs. W. A., Chamblee

Morse, Mrs. Chester W., 920 Scott
Blvd., Decatur

Powell, Mrs. F. C., 124 Mimosa Pl.,
Decatur

Sanders, Mrs. Floyd R., 212 E. Ponce
de Leon, Decatur

Shinall, Mrs. R. P., 1513 Scott Blvd.,
Decatur

Simmons, Mrs. M. Freeman, 108
Greenwood Pl., Decatur

Smith, Mrs. W. P., 192 Lamont Dr.,
Decatur

Smoot, Mrs. Richard H., 240 Third
Ave., Decatur

Stewart, Mrs. T. W., Lithonia

Fulton County

- President, Mrs. F. Kells Boland, Jr., Atlanta
- Abbott, Mrs. Osler A., 3037 W. Pine Valley Rd., N. W., Atlanta
- Adams, Mrs. H. M. S., 1257 Euclid Ave., N. E., Atlanta
- Agnor, Mrs. Elbert B., 2353 Westminster Way, N. E., Atlanta
- Akin, Mrs. John T., Jr., 2072 Cottage Lane, N. W., Atlanta
- Allen, Mrs. Enstace A., 18 Collier Rd., N. W., Atlanta
- Allgood, Mrs. Pierce, 519 Old Ivy Rd., Atlanta
- Anderson, Mrs. Robert T., 1723 Boulevard Dr., N. E., Atlanta
- Anderson, Mrs. Samuel A., 26 Sheridan Dr., N. E., Atlanta
- Anderson, Mrs. W. W., 363 Avery Dr., N. E., Atlanta
- Armstrong, Mrs. Wm. B., 521 Spring Valley Rd., N. E., Atlanta
- Arnold, Mrs. W. A., 55 Briarcliff Circle, N. E., Atlanta
- Arp, Mrs. C. Raymond, 80 Westminster Dr., N. E., Atlanta
- Arthur, Mrs. J. F., 828 Adair Ave., N. E., Atlanta
- Askew, Mrs. Hulett, 1329 Springdale Rd., N. E., Atlanta
- Askew, Mrs. Rufus A., 2489 Habersham Rd., N. W., Atlanta
- Askren, Mrs. E. L., Jr., 685 Timm Valley Rd., N. W., Atlanta
- Aven, Mrs. C. C., 2325 Roswell Rd., N. W., Atlanta
- Baker, Mrs. L. P., 52 Seventeenth St., N. E., Atlanta
- Bancker, Mrs. Evert A., 3810 Club Dr., N. E., Atlanta
- Barfield, Mrs. Forrest M., 77 Peachtree-Memorial Dr., N. W., Atlanta
- Barnett, Mrs. Crawford F., 2628 Rivers Rd., N. W., Atlanta
- Bateman, Mrs. Gregory W., 499 McAllister St., S. W., Atlanta
- Bateman, Mrs. Needham B., 88 Woodsy Way, Atlanta
- Beard, Mrs. Donald E., 1410 Peachtree St., N. E., Atlanta
- Beasley, Mrs. B. T., 233 North Colonial Homes Cir., Atlanta
- Bennett, Mrs. W. H., 829 W. Wesley Rd., N. W., Atlanta
- Benson, Mrs. H. Bagley, 3065 E. Pine Valley Rd., N. W., Atlanta
- Benson, Mrs. Marion T., Sr., 36 Sheridan Dr., N. E., Atlanta
- Benson, Mrs. Marion T., Jr., 3301 Habersham Rd., N. W., Atlanta
- Berry, Mrs. Maxwell, 2887 Howell Mill Rd., N. W., Atlanta
- Bivings, Mrs. Lee, 1310 Habersham Rd., N. W., Atlanta
- Blackman, Mrs. W. W., 248 W. Andrews Dr., N. E., Atlanta
- Blaine, Mrs. Belford C., 118 Terrace Dr., N. E., Atlanta
- Blalock, Mrs. J. C., 734 W. Wesley Rd., N. W., Atlanta
- Blalock, Mrs. Tully T., 4241 Club Dr., N. E., Atlanta
- Bloom, Mrs. Walter L., 845 Clifton Rd., N. E., Atlanta
- Blumberg, Mrs. Max, 251 Tenth St., N. W., Atlanta
- Boland, Mrs. Chas. G., 123 Rumson Rd., N. E., Atlanta
- Boland, Mrs. Frank K., 252 Peachtree Cir., N. E., Atlanta
- Boland, Mrs. Frank Kels, Jr., 128 Peachtree-Memorial Dr., N. W., Atlanta
- Boland, Mrs. J. H., 120 Sheridan Dr., N. E., Atlanta
- Boling, Mrs. Edgar, 1236 Springdale Rd., N. E., Atlanta
- Bendurant, Mrs. H. W., 118 Sheridan Dr., N. E., Atlanta
- Boyd, Mrs. Hartwell, 263 The Prado, N. E., Atlanta
- Browner, Mrs. Jas. N., Sr., 2800 Peachtree Rd., N. E., Atlanta
- Browner, Mrs. Jas. N., Jr., 262 W. Wesley Rd., N. W., Atlanta
- Brewer, Mrs. Frank B., 4347 E. Brookhaven Dr., Atlanta
- Brown, Mr. Robert L., 189 Avery Dr., N. E., Atlanta
- Brown, Mrs. S. Ross, 1000 Peachtree Battle, Atlanta
- Brown, Mrs. Stephen T., 1088 Oxford Rd., N. E., Atlanta
- Bryan, Mrs. Wm. W., 401 Peachtree Battle Ave., Atlanta
- Bunce, Mrs. Allen H., 368 Ponce de Leon Ave., N. E., Atlanta
- Burge, Mrs. Dan, 1507 Markan Dr., N. E., Atlanta
- Burnett, Mrs. Stacy W., 1884 Ponce de Leon Ave., N. E., Atlanta
- Bush, Mrs. O. B., 57 Rumson Way, N. E., Atlanta
- Byrd, Mrs. T. Luther, 126 Blackland Rd., N. W., Atlanta
- Cale, Mrs. Ellsworth F., 210 Williams St., East Point
- Davenport, Mrs. T. F., 1038 Peachtree Battle Ave., Atlanta
- Davis, Mrs. Robert Carter, 1950 W. Paces Ferry, N. W., Atlanta
- Davis, Mrs. Shelley C., 1259 Peachtree Battle Ave., Atlanta
- Davis, Mrs. W. B., 720 W. Walker Ave., College Park
- Davison, Mrs. T. C., 25 Valley Rd., N. W., Atlanta
- Denton, Mrs. John F., 1503 Peachtree St., N. E., Atlanta
- Dew, Mrs. J. Harris, 214 Peachtree Battle Ave., Atlanta
- Dickson, Mrs. Roger W., 1933 Walthall Dr., N. W., Atlanta
- Dobes, Mrs. Wm. L., 912 Lullwater Rd., N. E., Atlanta
- Derough, Mrs. W. S., 2450 Peachtree Rd., N. W., Atlanta
- Dougherty, Mrs. Mark S., 285 Old Ivey Rd., N. E., Atlanta
- Dowman, Mrs. Charles E., Sr., 630 Linwood Ave., N. E., Atlanta
- Dunn, Mrs. W. M., 2801 Andrews Dr., N. E., Atlanta
- Dunstan, Mrs. Edgar M., 604 Ponce de Leon Pl., Decatur
- DuVall, Mrs. W. B., 905 Cascade Ave., S. W., Atlanta
- Earle, Mrs. Walter C., 1930 Grey-stone Rd., N. W., Atlanta
- Eberhart, Mrs. Charles, 1206 Cumberland Rd., N. E., Atlanta
- Edgerton, Mrs. Milton T., 788 Penn Ave., N. E., Atlanta
- Edwards, Mrs. William T., 1034 W. College Ave., Decatur
- Ellis, Mrs. John Oliver, 251 N. Colonial Homes Cir., Atlanta
- Equen, Mrs. Murdock, 2505 Habersham Rd., N. W., Atlanta
- Evans, Mrs. A. L., 2393 Hurst Dr., N. E., Atlanta
- Evans, Mrs. Edwin C., 1460 Emory Rd., N. E., Atlanta
- Fancher, Mrs. J. K., 3094 Pine Valley Rd., N. W., Atlanta
- Fincher, Mrs. Edgar F., 109 Peachtree Cir., N. E., Atlanta
- Fish, Mrs. John S., 564 Ridgecrest Rd., N. E., Atlanta
- Fischer, Mrs. L. C., Sharpsburg
- Calhoun, Mrs. F. Phinizy, Sr., 2906 Andrews Dr., N. W., Atlanta
- Calhoun, Mrs. F. Phinizy, Jr., 540 Peachtree Battle, N. W., Atlanta
- Camp, Mrs. Reuben T., Fairburn
- Campbell, Mrs. John D., 683 Darlington Rd., N. E., Atlanta
- Candler, Mrs. Robert W., West Paces Ferry Rd., N. W., Atlanta
- Carter, Mrs. Sandy B., 2695 Sharon-dale Dr., N. E., Atlanta
- Chalmers, Mrs. Rives, 2400 Westminster Way, N. E., Atlanta
- Childs, Mrs. J. R., 1050 Ponce de Leon Ave., N. E., Atlanta
- Christopher, Mrs. F. E., 1769 Meadowdale Ave., N. E., Atlanta
- Clark, Mrs. Jas. J., 1031 Springdale Rd., N. E., Atlanta
- Claiborne, Mrs. T. Sterling, 455 W. Wesley Rd., N. W., Atlanta
- Clifton, Mrs. Ben Hill, 1893 Wycliff Rd., N. W., Atlanta
- Codington, Mrs. A. B., 3181 Mathieson Dr., N. E., Atlanta
- Cofer, Mrs. Olin S., 943 Lullwater Rd., N. E., Atlanta
- Cohen, Mrs. Isidore R., 2295 N. Decatur Rd., N. E., Atlanta
- Coleman, Mrs. Reese C., Jr., 2762 Dover Rd., N. W., Atlanta
- Collinsworth, Mrs. Allen M., 60 Montgomery Ferry Dr., N. W., Atlanta
- Combs, Mrs. James M., 2384 Sewell Rd., S. W., Atlanta
- Cooke, Mrs. Virgil C., Baker's Ferry Rd., S. W., Atlanta
- Coppedge, Mrs. Wm. W., 313 Kimberidge Dr., East Point
- Corley, Mrs. F. L., 626 Morningside Dr., N. E., Atlanta
- Consins, Mrs. Wm. L., Route No. 1, Tucker
- Crawford, Mrs. H. C., 3000 E. Pine Valley Rd., N. W., Atlanta
- Cross, Mrs. John B., 2606 Dellwood Dr., N. W., Atlanta
- Crowe, Mrs. W. R., 1069 Virginia Ave., N. E., Atlanta
- Curtis, Mrs. Walker L., 302 W. Rugby Ave., College Park, Ga.
- Daly, Mrs. Leo P., 480 E. Wesley Rd., N. E., Atlanta
- Daniel, Mrs. Charles H., 801 W. Rugby Ave., College Park
- Daniel, Mrs. Eugene L., 230 Howard St., N. E., Atlanta
- Daniel, Mrs. Walter W., 1705 Pelham Rd., N. E., Atlanta
- Fitts, Mrs. John B., 31 LaFayette Dr., N. E., Atlanta
- Florence, Mrs. Thomas J., 1420 Rock Springs Terrace, Atlanta
- Floyd, Mrs. Earl, 1 W. Muscogee Ave., N. W., Atlanta
- Fort, Mrs. Chester A., Jr., 1252 Emory Circle, N. E., Atlanta
- Foster, Mrs. Kimsey E., 207 Columbia Ave., College Park

- Fowler Mrs. C. Dixon, 2375 Haven Ridge Dr., N. W., Atlanta
 Friedman, Mrs. Milton, 939 Courtenay Dr., N. E., Atlanta
 Frierson, Mrs. Norton, 2903 North Hills Dr., N. E., Atlanta
 Funke, Mrs. John, 712 Durant Pl., N. E., Atlanta
 Funkhouser, Mrs. Wm. L., 2419 Woodward Way, N. W., Atlanta
 Galvin, Mrs. Wm. H., 33 Andrews Circle, Emory, Atlanta
 Gay, Mrs. Thos. Bolling, 3042 W. Pine Valley Rd., Atlanta
 Glenn, Mrs. Wadley R., 6565 Glennridge Dr., Dunwoody
 Glisson, Mrs. C. Stedman, Jr., 1012 Cumberland Rd., N. E., Atlanta
 Goodwin, Mrs. Franklin H., 223 N. Colonial Homes Cir., Atlanta
 Goodwyn, Mrs. Thos. P., 2480 Woodward Way, N. W., Atlanta
 Green, Mrs. Samuel, 697 E. Morning-side Dr., Atlanta
 Greene, Mrs. Edgar H., 1442 W. Wesley Rd., N. W., Atlanta
 Griffin, Mrs. Claude, 28 Brookhaven Dr., Atlanta
 Hamff, Mrs. L. Harvey, 1063 E. Clifton Rd., N. E., Atlanta
 Hamm, Mrs. Wm. G., 2877 Habersham Rd., N. W., Atlanta
 Hancock, Mrs. Robert K., 156 Conway Rd., Decatur
 Hanes, Mrs. O. E., 2347 Virginia Pl., N. E., Atlanta
 Hanner, Mrs. James P., 2677 Arden Rd., N. E., Atlanta
 Harrison, Mrs. M. T., 1096 E. Clifton Rd., N. E., Atlanta
 Hauck, Mrs. A. E., 99 Princeton Way, N. E., Atlanta
 Hecht, Mrs. Emanuel B., 1181 Stewart Ave., S. W., Atlanta
 Hewell, Mrs. Guy C., 1123 Berkshire Rd., N. E., Atlanta
 Hill, Mrs. Haywood, 2316 Lindmont Cir., N. E., Atlanta
 Hill, Mrs. Wm. Harry, 946 Juniper St., N. E., Atlanta
 Hobby, Mrs. A. Worth, 1740 Meadowdale Ave., N. E., Atlanta
 Hodges, Mrs. Fred B., Jr., 3265 Wood Valley Rd., N. W., Atlanta
 Holloway, Mrs. Chas. E., 2637 E. Wesley Terrace, N. E., Atlanta
 Holloway, Mrs. George A., 489 Westover Dr., N. W., Atlanta
 Holmes, Mrs. Walter R., 85 Peachtree Circle, N. E., Atlanta
 Hopkins, Mrs. Wm. A., 1374 Villa Dr., N. E., Atlanta
 Howell, Mrs. Stacy C., 434 Brentwood Dr., N. E., Atlanta
 Howard, Mrs. Charles K., 2289 Venetian Dr., S. W., Atlanta
 Hrdlicka, Mrs. George R., 988 Winall Down Rd., N. W., Atlanta
 Hudson, Mrs. Paul L., 19 Brookhaven Dr., N. E., Atlanta
 Huie, Mrs. Robert E., 19 Exeter Rd., Avondale Estates
 Hurst, Mrs. Willis, 2857 North Hills Dr., N. E., Atlanta
 Hydrick, Mrs. Peter, 120 Ridgeway, College Park, Ga.
 Ivey, Mrs. John C., 1655 Ponce de Leon Ave., N. E., Atlanta
 Jacobs, Mrs. John L., 2883 Andrews Dr., N. E., Atlanta
 Jennings, Mrs. J. L., 683 Elkmont Dr., N. E., Atlanta
 Jernigan, Mrs. Sterling H., 2258 Virginia Pl., N. E., Atlanta
 Jernigan, Mrs. H. Walker, 352 Redland Rd., N. W., Atlanta
 Johnson, Mrs. McClaren, 23 Collier Rd., N. W., Atlanta
 Jones, Mrs. Jack W., 129 Brighton Rd., N. E., Atlanta
 Josephs, Mrs. Alvin D., 939 Courtenay Dr., N. E., Atlanta
 Kelley, Mrs. L. H., 952 Rosedale Rd., N. E., Atlanta
 Kelly, Mrs. James D., 2724 Atwood Rd., N. E., Atlanta
 Kelly, Mrs. Robert P., 3016 Lenox Rd., N. E., Atlanta
 Kemper, Mrs. Clifton G., 956 Stovall Blvd., N. E., Atlanta
 King, Mrs. C. Richard, 263 N. Colonial Homes Cir., Atlanta
 King, Mrs. James T., 212 Kathryn Ave., Decatur
 King, Mrs. John Dudley, 1215 W. Wesley Rd., N. W., Atlanta
 King, Mrs. Lewell S., 119 Rugby Cir., College Park
 Kirkland, Mrs. Spencer A., 106 Peachtree Battle Ave., Atlanta
 Kiser, Mrs. Wm. H., Jr., 210 Peachtree Cir., N. E., Atlanta
 Kite, Mrs. J. H., 633 E. Ponce de Leon Ave., Decatur
 Klugh, Mrs. George F., 395 Tenth St., N. E., Atlanta
 Krugman, Mrs. Philip I., 115 Peachtree Memorial Dr., Atlanta
 Lamm, Mrs. J. Herman, 324 N. Colonial Homes Cir., Atlanta
 Landham, Mrs. Jackson W., 4199 Club Dr., N. E., Atlanta
 Lange, Mrs. J. Harry, 2870 Arden Rd., N. W., Atlanta
 Lawrence, Mrs. Charles E., 1182 Oakdale Rd., N. E., Atlanta
 Leigh, Mrs. Ted F., 2544 Peachtree Rd., Atlanta
 Letton, Mrs. A. Hamblin, 1 Pine Cir., N. E., Atlanta
 Lewis, Mrs. John R., Jr., 825 Woodley Dr., N. W., Atlanta
 Linch, Mrs. A. O., 943 Rosedale Rd., N. E.
 Logue, Mrs. Bruce, 145 Westminster Dr., N. E., Atlanta
 Long, Mrs. Leonard, 1083 E. Clifton Rd., N. E., Atlanta
 Longino, Mrs. Dick R., 1344 Lanier Blvd., N. E., Atlanta
 Lowance, Mrs. Mason I., 877 W. Wesley Rd., N. W., Atlanta
 Lower, Mrs. Emory G., 619 Myrtle St., N. E., Atlanta
 Lunsford, Mrs. Guy G., 4010 Osborn Rd., Chamblee
 Lyon, Mrs. Harry C., 660 Wilson Rd., N. W., Atlanta
 McCain, Mrs. John R., 219 Sycamore Dr., Decatur
 McClure, Mrs. Robert E., 233 A Peachtree Cir., N. E., Atlanta
 McDonald, Mrs. Lewis H., 625 Darlington Rd., N. E., Atlanta
 McDougall, Mrs. J. Calhoun, 2899 Andrews Dr., N. W., Atlanta
 McDougall, Mrs. Wm. L., 280 Blackland Rd., N. W., Atlanta
 McElroy, Mrs. Joseph D., 1551 Mayflower Ave., S. W., Atlanta
 McGee, Mrs. R. W., Ben Hill
 McLoughlin, Mrs. Chris J., 2465 Rivers Rd., N. W., Atlanta
 McMillan, Mrs. J. C., 804 S. Friddell
 McRae, Mrs. Floyd W., 3053 Habercir., East Point
 -sham Rd., N. W., Atlanta
 Main, Mrs. Emory H., 710 Walker Ave., College Park
 Martin, Mrs. Anthony J., Pinegrove Rd., Roswell
 Marvin, Mrs. Charles P., 4110 Mabry Rd., N. E., Atlanta
 Massee, Mrs. Joseph C., 1146 Lullwater Rd., N. E., Atlanta
 Matthews, Mrs. O. H., 61 Barksdale Drive, N. E., Atlanta
 Matthews, Mrs. Thomas V., 2184 Peachtree Rd., N. W., Atlanta
 Matthews, Mrs. Warren B., 216 N. Candler St., Decatur
 Miller, Mrs. Linus Jr., 21 LaFayette Way, N. W., Atlanta
 Mills, Mrs. Clarence W., Jr., 348 E. Wesley Rd., N. E., Atlanta
 Minnich, Mrs. F. R., 3035 E. Pine Valley Rd., N. W., Atlanta
 Minnich, Mrs. Wm. R., 21 Vernon N. W., Atlanta
 Minor, Mrs. Henry W., 4665 Peachtree-Dunwoody Rd., Atlanta
 Mitchell, Mrs. Wm. E., 438 W. Wesley Rd., N. W., Atlanta
 Monfort, Mrs. J. M., 3870 Club Dr., N. E., Atlanta
 Morris, Mrs. Albert L., Fairburn
 Morris, Mrs. S. L., Jr., 58 Brighton Rd., N. E., Atlanta
 Mesley, Mrs. Hugh G., 3514 Nancy Creek Rd., Atlanta
 Murphy, Mrs. M. V., 150 Huntington Rd., N. W., Atlanta
 Nall, Mrs. J. D., 227 Garden Lane, Decatur
 Neel, Mrs. M. M., Route No. 2, College Park
 Noel, Mrs. M. E., 39 Howard St., N. E., Atlanta
 Norris, Mrs. Jack C., 511 Peachtree Battle Ave., N. W., Atlanta
 Norwood, Mrs. Samuel W., 76 Inman Cir., N. E., Atlanta
 O'Neal, Mrs. Buford L., 173 Putnam Cir., N. W., Atlanta
 Owensby, Mrs. N. M., Georgian Terrace Hotel, Atlanta
 Parks, Mrs. Harry, 2479 Dellwood Dr., N. E., Atlanta
 Patterson, Mrs. Jos. H., 115 Peachtree Memorial Dr., Atlanta
 Paulin, Mrs. James E., 2834 Andrews Dr., Atlanta
 Pendergrast, Mrs. Wm. J., 5000 Briarcliff Rd., Atlanta
 Perry, Mrs. Samuel W., 1427 Peachtree St., Atlanta
 Phillips, Mrs. Haywood S., 1738 Homestead Ave., N. E., Atlanta
 Pierotti, Mrs. Julius V., 2 Collier Rd., N. W., Atlanta
 Pittman, Mrs. James L., 2966 Howell Mill Rd., N. W., Atlanta
 Powell, Mrs. Vernon E., 2514 Woodward Way, N. W., Atlanta
 Pruitt, Mrs. Marion C., 431 W. Wesley Rd., N. W., Atlanta
 Raiford, Mrs. Morgan B., 245 Bolling Rd., N. E., Atlanta
 Rasmussen, Mrs. Earl, 2420 Peachtree Rd., Atlanta

Read, Mrs. Ben S., 993 Stovall Blvd., Atlanta
 Read, Mrs. Joseph C., 3970 Vermont Rd., N. E., Atlanta
 Redd, Mrs. Stephen C., 3515 Ridgewood Rd., Atlanta
 Rhodes, Mrs. C. A., 75 Ponce de Leon Ave., N. E., Atlanta
 Rice, Mrs. Guy V., Jr., 796 Clemont Dr., N. E., Atlanta
 Richardson, Mrs. Jeff L., 969 Clifton Rd., N. E., Atlanta
 Ridley, Mrs. Harry W., 1055 Rosewood Dr., N. E., Atlanta
 Ricser, Mrs. Charles, 3777 Paces Ferry Rd., N. W., Atlanta
 Rieth, Mrs. Paul L., 1605 Harvard Rd., N. E., Atlanta
 Roach, Mrs. George S., Jr., 683 Juniper St., N. E., Atlanta
 Robinson, Mrs. Lisle B., 878 Myrtle St., N. E., Atlanta
 Roberts, Mrs. C. W., 3250 Ridgewood Rd., N. W., Atlanta
 Roberts, Mrs. M. Hines, 393 W. Wesley Rd., N. W., Atlanta
 Roberts, Mrs. Stewart R., 16 Woodcrest Ave., N. W., Atlanta
 Robinson, Mrs. Robt. L., 3870 Lake Forrest Dr., N. W., Atlanta
 Rogers, Mrs. J. Harry, 699 E. Paces Ferry Rd., N. W., Atlanta
 Rouglin, Mrs. L. C., 1136 Briarcliff Rd., N. E., Atlanta
 Rosenberg, Mrs. H. J., 846 Briarcliff Rd., N. E., Atlanta
 Sage, Mrs. Dan Y., 47 Inman Circle, N. E., Atlanta
 Sanders, Mrs. A. S., 1660 N. Emory Rd., N. E., Atlanta
 Scarborough, Mrs. J. E., 100 Westminster Dr., N. E., Atlanta
 Schroder, Mrs. J. Spalding, 2786 Atwood Rd., N. E., Atlanta
 Schroeder, Mrs. Paul L., 1428 Peachtree St., N. E., Atlanta
 Sealey, Mrs. R. Mitchel, 2905 Sanford Rd., Atlanta
 Selman, Mrs. W. A., 760 Penn Ave., N. E., Atlanta
 Shackelford, Mrs. B. L., 120 Blackland Rd., N. W., Atlanta
 Skobba, Mrs. Joseph F., 25 Sheridan Dr., N. E., Atlanta
 Sheldon, Mrs. Walter H., 1117 Zimmer Dr., N. E., Atlanta
 Shepard, Mrs. Duncan, 80 28th St., N. W., Atlanta
 Skiles, Mrs. Vernon, 2500 Acorn Ave., N. E., Atlanta
 Slade, Mrs. John deR., 409 Collier Rd., N. W., Atlanta
 Sloan, Mrs. W. P., Sr., 1282 Oakdale Rd., N. E., Atlanta
 Smith, Mrs. Carter, 450 W. Wesley Rd., Atlanta
 Smith, Mrs. Charles W., 1002 Oxford Rd., N. E., Atlanta
 Smith, Mrs. Joel P., 1264 Burlington Rd., N. E., Atlanta
 Smith, Mrs. Linton, Pershing Hotel, Atlanta
 Smith, Mrs. Randolph, 37 LaFayette Dr., N. E., Atlanta
 Smith, Mrs. Wm. A., 2956 Lenox Rd., N. E., Atlanta
 Spier, Mrs. Eugene, 508 Twin Oak Dr., Atlanta
 Staton, Mrs. T. R., 1026 St. Charles Ave., N. E., Atlanta

Steadman, Mrs. Henry E., 3021 Stewart Ave., Hapeville
 Stephenson, Mrs. Robert H., 2249 Virginia Pl., N. E., Atlanta
 Stewart, Mrs. Calvin B., 21 W. Andrews Dr., N. W., Atlanta
 Stillerman, Mrs. H. B., 2367 Cascade Rd., S. W., Atlanta
 Stone, Mrs. Charles F., Jr., 4175 Club Dr., N. E., Atlanta
 Strickler, Mrs. C. W., Sr., 671 Oakdale Rd., N. E., Atlanta
 Stickler, Mrs. C. W., Jr., 355 Peachtree Battle, N. W., Atlanta
 Swanson, Mrs. Cosby, 10 Cherokee Rd., Atlanta
 Swanson, Mrs. Homer S., 3834 Vermont Rd., N. E., Atlanta
 Tabb, Mrs. W. G., Jr., 2367 B Lindmont Cir., N. E., Atlanta
 Tankesley, Mrs. R. M., 209 Oak Lane, Atlanta
 Taranto, Mrs. M. B., 1638 Barclay Pl., Atlanta
 Thebaut, Mrs. Ben R., 6800 Peachtree-Dunwoody Rd., Atlanta
 Thomason, Mrs. W. L., 137 W. Wesley Rd., N. W., Atlanta
 Thompson, Mrs. D. O., 594 Westover Dr., N. W., Atlanta
 Thompson, Mrs. John W., 2041 Fairhaven Cir., N. E., Atlanta
 Thompson, Mrs. W. R., 3765 Peachtree Rd., N. E., Atlanta
 Tidmore, Mrs. T. L., 963 Plymouth Rd., N. E., Atlanta
 Timberlake, Mrs. Lloyd, 670 Longwood Dr., N. E., Atlanta
 Turk, Mrs. L. N., Jr., 1516 N. Morningside Dr., N. E., Atlanta
 Turner, Mrs. Edwin W., 1119 Winburn Dr., East Point
 Turner, Mrs. John W., 3985 Vermont Rd., N. E., Atlanta
 Upshaw, Mrs. Charles B., 394 W. Wesley Rd., Atlanta
 Van Buren, Mrs. E., 837 Clifton Rd., N. E., Atlanta
 Van Dyke, Mrs. A. H., 1925 Grey-stone Rd., N. W., Atlanta
 Varner, Mrs. John B., 181 Peachtree Battle Ave., Atlanta
 Vella, Mrs. Paul D., 984 Northcliff Dr., N. W., Atlanta
 Wagon, Mrs. George, 360 Hascall Rd., N. W., Atlanta
 Ward, Mrs. Emmett, 634 Flat Shoals Ave., S. E., Atlanta
 Warner, Mrs. W. P., Jr., 105 Peachtree-Memorial Dr., Atlanta
 Warren, Mrs. Wm. C., Jr., 930 Briarcliff Rd., N. E., Atlanta
 Waters, Mrs. W. C., 878 Virginia Ave., N. E., Atlanta
 Weinberg, Mrs. James I., 2356 Montview Dr., N. W., Atlanta
 Weinstein, Mrs. Alfred A., 380 Whitmore Dr., N. W., Atlanta
 Weitz, Mrs. Frank, 1041 West Peachtree St., Atlanta
 Whipple, Mrs. Robert L., Jr., 919 Peachtree Battle, Atlanta
 Whitaker, Mrs. Wm. G., Jr., 1412 Clairmont Rd., Decatur
 Willingham, Mrs. T. Irvin, 3781 Tuxedo Rd., N. W., Atlanta
 Wilson, Mrs. Richard, 1878 Monroe Dr., N. E., Atlanta
 Woddail, Mrs. Joseph D., 891 Amsterdam Ave., N. E., Atlanta

Wolff, Mrs. Bernard P., 2748 Howell Mill Rd., N. W., Atlanta
 Wood, Mrs. R. Hugh, 900 W. Wesley, Atlanta
 Wooley, Mrs. Lawrence F., 1607 Barclay Pl., N. E., Atlanta
 Worth, Mrs. Jack J., Jr., 1434 Miller Ave., N. E., Atlanta
 Wright, Mrs. Edward S., 2965 Howell Mill Rd., N. W., Atlanta
 Yanpolsky, Mrs. Jos., 746 Brookridge Dr., N. E., Atlanta

SIXTH DISTRICT

Manager: Mrs. J. R. S. May, Macon

Baldwin County

President, Mrs. R. W. Bradford, Milledgeville
 Allen, Mrs. E. W., Allen's Invalid Home, Milledgeville
 Allen, Mrs. H. D., Allen's Invalid Home, Milledgeville
 Allen, Mrs. T. P., N. Jefferson St., Milledgeville
 Bailey, Mrs. L. A., Columbia St., Milledgeville
 Binion, Mrs. Richard, Green St., Milledgeville
 Bostick, Mrs. W. A., Milledgeville State Hospital, Milledgeville
 Bradford, Mrs. R. W., Milledgeville State Hospital, Milledgeville
 Cary, Mrs. H. R., 503 W. Montgomery St., Milledgeville
 Clodfelter, Mrs. T. C., Milledgeville State Hospital, Milledgeville
 Chesnutt, Mrs. T. H., Milledgeville State Hospital, Milledgeville
 Crichton, Mrs. R. B., Milledgeville State Hospital, Milledgeville
 Echols, Mrs. G. L., Milledgeville State Hospital, Milledgeville
 Fulghum, Mrs. C. B., 210 Jefferson St., Milledgeville
 Garrard, Mrs. J. I., Clark St., Milledgeville
 Gibson, Mrs. Wallace, Milledgeville State Hospital, Milledgeville
 Longino, Mrs. L. P., Green St., Milledgeville
 Peacock, Mrs. T. G., Milledgeville State Hospital, Milledgeville
 Richardson, Mrs. C. H., Columbia St., Milledgeville
 Smith, Mrs. M. E., Milledgeville State Hospital, Milledgeville
 Walker, Mrs. E. Y., Columbia St., Milledgeville
 Walker, Mrs. N. P., Green St., Milledgeville
 Woods, Mrs. O. C., N. Jefferson St., Milledgeville
 Wiley, Mrs. John D., Milledgeville State Hospital, Milledgeville
 Williams, Mrs. D. C., Sr., Milledgeville State Hospital, Milledgeville
 Waller, Mrs. Robert, Milledgeville State Hospital, Milledgeville

Bibb County

President, Mrs. William K. Jordan, Macon
 Aldrich, Mrs. Fred N., 3128 Brookwood Dr., Macon
 Anderson, Mrs. J. C., 2616 Stanislaus Cir., Macon
 Applewhite, Mrs. J. D., 633 College St., Macon
 Atkinson, Mrs. Harold C., 111 Buford Pl., Macon
 Barton, Mrs. William L., 200 Waverland Dr., Macon

Bashinski, Mrs. Benjamin, 161 Buford Pl., Macon
 Baxley, Mrs. W. W., 445 Pierce Dr., Macon
 Bazemore, Mrs. Wallace L., 195 Beverly Pl., Macon
 Billingshurst, Mrs. Geo. A., 3255 Ingle-side Ave., Macon
 Boswell, Mrs. W. C., 362 Buford Pl., Macon
 Brown, Mrs. Roland A., 306 Orange St., Macon
 Bush, Mrs. Holloway, 3145 Vista Cir., Macon
 Chrisman, Mrs. W. W., 165 Corbin Ave., Macon
 Clay, Mrs. J. Emory, 2764 Cherokee Ave., Macon
 Cole, Mrs. Allan A., 267 Buford Pl., Macon
 Corn, Mrs. Ernest, 607 College St., Macon
 Dove, Mrs. W. B., 135 Boulevard, Macon
 Dupree, Mrs. George W., Gordon
 Dupree, Mrs. John T., Gordon
 Edenfield, Mrs. R. W., 252 Riverdale Dr., Macon
 Farmer, Mrs. C. Hall, 118 Pio Nona Ave., Macon
 Fountain, Mrs. James A., 216 Jackson Springs Rd., Macon
 Golsan, Mrs. Willard R., 1294 Courtland Ave., Macon
 Goodman, Mrs. Leon J., 2670 Vineville Ave., Macon
 Goolby, Mrs. R. Cullen, 159 Rogers Ave., Macon
 Hall, Mrs. John J., 971 High St., Macon
 Hanson, Mrs. J. Fletcher, 3834 The Prado, Macon
 Harrold, Mrs. Charles C., 606 Orange St., Macon
 Harrold, Mrs. Thomas Jr., 647 College St., Macon
 Hatcher, Mrs. Milford B., 2223 Elm Ridge Dr., Macon
 Hazlehurst, Mrs. W. D., 3270 Vista Cir., Macon
 Henderson, Mrs. D. T., Vineville Ct., Macon
 Hinton, Mrs. Charles C., Wesleyan Conservatory, Macon
 Houser, Mrs. Frank M., Waverland Dr., Macon
 James, Mrs. L. P., 246 Corbin Ave., Macon
 Jarrett, Mrs. W. Devereaux, Jr., 756 College St., Macon
 Jones, Mrs. John Paul, Brookwood Apts., Macon
 Jordan, Mrs. William K., 923 High St., Macon
 Kay, Mrs. J. B., Byron
 Keen, Mrs. O. F., 2319 Clayton St., Macon
 King, Mrs. J. L., 283 Buford Pl., Macon
 Lewis, Mrs. W. Earl, 940 Columbus St., Macon
 Mass, Mrs. Max, 125 The Prado, Macon
 Mays, Mrs. J. R. S., 2587 Elizabeth Pl., Macon
 McAllister, Mrs. R. W., 3130 Ingle-side Ave., Macon
 McFarlane, Mrs. J. W., 3163 Brookwood Dr., S., Macon
 McLaughlin, Mrs. Charles K., 3726 Overlook Ave., Macon

McMichael, Mrs. V. H., Upper River Rd., Macon
 McMillan, Mrs. E. C., 166 Rogers Ave., Macon
 Mobley, Mrs. Walter E., 619 College St., Macon
 Neal, Mrs. Jule C., 3115 Brookwood Dr., Macon
 Newman, Mrs. W. A., 645 Orange St., Apt. 7, Macon
 Newton, Mrs. Ralph G., 3360 Ridge Ave., Macon
 Patton, Mrs. Sam E., 243 Beverly Pl., Macon
 Phillips, Mrs. A. M., 131 Buford Pl., Macon
 Popc, Mrs. Edgar M., 555 Arlington Pl., Macon
 Porch, Mrs. Leon D., 294 Riverdale Dr., Macon
 Reiffer, Mrs. R. M., 2482 McDonald Ave., Macon
 Richardson, Mrs. Charles H., 2745 Cherokee Ave., Macon
 Richardson, Mrs. Charles H., Jr., 135 Jackson Springs Rd., Macon
 Richardson, Mrs. Rhea W., 3618 Forsyth Rd., Macon
 Ridley, Mrs. Charles L., Jr., 3180 Brookwood Dr., Macon
 Rogers, Mrs. T. E., 186 Clisby Pl., Macon
 Ross, Mrs. Thomas L., Jr., 316 Nottingham Dr., Macon
 Rozar, Mrs. A. R., 336 S. Jackson Springs Rd., Macon
 Rubin, Mrs. Sam N., Gordon
 Rumble, Mrs. Charles T., 219 Albe-marle Pl., Macon
 Siegel, Mrs. Alvin E., Medical Arts Bldg., Macon
 Smith, Mrs. Allen, 3125 Ingle-side Ave., Macon
 Thompson, Mrs. O. R., 212 Pio Nona Ave., Macon
 Tift, Mrs. Henry H., 420 Nottingham Dr., Macon
 Vinson, Mrs. Frank, Ft. Valley
 Walker, Mrs. D. D., 2631 Stanislaus Cir., Macon
 Watson, Mrs. Edwin R., 2814 Vineville Ave., Macon
 Weaver, Mrs. Hudnall G., 183 Callo-way St., Macon
 Williams, Mrs. W. A., 2649 Stanislaus Cir., Macon
 Woods, Mrs. Charles J., 179 North Ave., Macon
 Work, Mrs. Sam, 420 Overlook Ave., Macon

Washington County

President, Mrs. Joseph E. Lever, Sandersville
 Dillard, Mrs. J. C., Davisboro
 Helton, Mrs. B. L., Sandersville
 King, Mrs. W. R., Tonnille
 Lennard, Mrs. O. D., Tonnille
 Lever, Mrs. Joseph E., Sandersville
 McElreath, Mrs. F. T., Tonnille
 Newsom, Mrs. N. J., Sandersville
 Newsome, Mrs. Emory G., Sandersville
 Overby, Mrs. N., Sandersville
 Rawlings, Mrs. F. D., Sandersville
 Rawlings, Mrs. William, Sandersville
 Rogers, Mrs. O. L., Sandersville

SEVENTH DISTRICT

Cobb County

President, Mrs. Earl Benson, Marietta

Allen, Mrs. George O., 1005 Cherokee St., Marietta
 Benson, Mrs. Regina Rambo, 406 Whitlock Ave., Marietta
 Benson, Mrs. William H., Burnt Hickory Road, Marietta
 Benson, Mrs. Earl, Bell's Ferry Road, Marietta
 Bailey, Mrs. E. M., Acworth
 Busch, Mrs. John F., 310 McDonald St., Marietta
 Burleigh, Mrs. Bruce D., Rt. 1, Powder Springs Road, Marietta
 Cagle, Mrs. George C., Jr., Acworth
 Crawley, Mrs. Walter G., 103 Freyer Drive, Marietta
 Colquitt, Mrs. Alfred O., Jr., 1011 Whitlock Ave., Marietta
 Colquitt, Mrs. Hugh, Smyrna
 Clark, Mrs. F. B., Austell
 Elder, Mrs. C. D., 509 Kennesaw Ave., Marietta
 Fowler, Mrs. Herbert, 1110 Cherokee St., Marietta
 Fowler, Mrs. Ralph, 303 McDorrald St., Marietta
 Garrett, Mrs. Luke, Sr., Austell
 Garrett, Mrs. Luke, Jr., Austell
 Garland, Mrs. Chas. Mayo, Jr., Smyrna
 Hagood, Mrs. Murl M., 617 Whitlock Ave., Marietta
 Lindley, Mrs. F. P., Powder Springs
 McCall, Mrs. Mose N., Acworth
 Musarra, Mrs. Elmer A., 101 Oakmont Drive, Marietta
 Perkinson, Mrs. W. H., 819 Church St., Marietta
 Welch, Mrs. L. L., 1011 Church St., Marietta

Deceased

Hagood, Mrs. George F., Sr., 710 Church St., Marietta

Floyd County

President, Mrs. Inman Smith, Rome
 Battle, Mrs. Lee H., Jr., Westmore Road, Rome
 Blalock, Mrs. Frank, Battey State Hospital, Rome
 Bosworth, Mrs. Ed L., 203 Charlton Road, Rome
 Coslett, Mrs. Floyd, Battey State Hospital, Rome
 Crow, Mrs. H. E., Battey State Hospital, Rome
 Davis, Mrs. Ralph J., Dodd St., Rome
 Dawson, Mrs. Harry, Shannon
 Dellinger, Mrs. A. H., 228 Sherwood Road, Rome
 Dellinger, Mrs. Raiden W., Charlton Road, Rome
 Garner, Mrs. J. S., Rome
 Garner, Mrs. Sam, Jr., Mimosa Drive, Rome
 Gilbert, Warren, 119 Westmore Drive, Rome
 Hackett, Mrs. Walter G., Cooper Drive, Rome
 Harbin, Mrs. Lester, Virginia Drive, Rome
 Harbin, Mrs. W. P., Jr., Virginia Drive, Rome
 Jenkins, Mrs. Oliver W., Lindale
 Johnson, Mrs. Ralph N., 510 E. Ninth, Rome

McCord, Mrs. M. M., E. Eleventh, Rome
 McCord, Mrs. Ralph B., Collinswood Road, Rome
 Mull, Mrs. J. H., E. Eleventh, Rome
 Norton, Mrs. Harvey, Cave Spring
 Norton, Mrs. Robert, Cooper Drive, Rome
 Payne, Mrs. Rufus, Battey State Hospital, Rome
 Sewell, Mrs. Wm. A., Chatillion Road, Rome
 Smith, Mrs. Inman, Berchman Lane, Rome
 Wyatt, Mrs. C. J., Jr., Bon Air Apts., Rome

Gordon County

President, Mrs. J. E. Billings, Calhoun
 Billings, Mrs. J. E., Calhoun
 Hall, Mrs. Wilbur D., Calhoun
 Richards, Mrs. Charles K., Calhoun
 Steele, Mrs. Byron, Fairmount
 Walter, Mrs. R. D., Fairmount

Whitfield County

President, Mrs. Eli A. Rosen, Dalton
 Ault, Mrs. Jacent Henry, 401 Selvidge St., Dalton
 Boozer, Mrs. Albert, 300 S. Thornton Ave., Dalton
 Bradley, Mrs. L. Paul, 300 Selvidge St., Dalton
 Erwin, Mrs. Lamar Harlan, 203 Cleveland, Dalton
 Kerr, Mrs. Stafford George, Chatsworth Road, Dalton
 Ragland, Mrs. Fred. Dug Gap Road, Dalton
 Rosen, Mrs. Eli A., 200 Lynn, Dalton
 Starr, Mrs. Trammell, 201 N. Thornton Ave., Dalton
 Summerour, Mrs. Brooke F., Chatsworth Road, Dalton
 Whitley, Mrs. R. James, Fairview Drive, Dalton
 Whitfield, Mrs. W. Truman, 300 Lynn, Dalton
 Wood, Mrs. Lloyd David, 207 N. Thornton Ave., Dalton

EIGHTH DISTRICT

Manager: Mrs. T. J. Ferrell, Waycross

Coffee County

President, Mrs. Horace G. Joiner, Douglas
 Clark, Mrs. R. H., Douglas
 Harper, Mrs. Sage, Douglas
 Jardine, Mrs. Dan A., Douglas
 Johnson, Mrs. Roy, Douglas
 Joiner, Mrs. Horace G., Douglas
 Meeks, Mrs. C. S., Douglas
 Oliver, Mrs. J. A., Douglas
 Quillian, Mrs. B. O., Douglas
 Ricketson, Mrs. C. M., Douglas
 Wallace, Mrs. J. W., Douglas

Glynn County

President, Mrs. T. H. Johnston, Brunswick
 Brawner, Mrs. Leon E., St. Simons Island
 Burford, Mrs. R. S., 1017 Egmont, Brunswick
 Coe, Mrs. Howard M., 3612 Franklin, Brunswick

Collier, Mrs. T. W., 1117 Palmetto Ave., Brunswick
 Greer, Mrs. C. B., 1127 Union, Brunswick
 Hicks, Mrs. James M., 1005 Lanier Blvd., Brunswick
 Johnston, Mrs. T. H., 511 Ellis, Brunswick
 Mitchell, Mrs. L. C., 804 2nd Ave., Brunswick
 Moore, Mrs. Haywood L., 2307 Gloucester, Brunswick
 Muse, Mrs. J. Phillip, 1201 Pine, Brunswick
 Robben, Mrs. Francis J., 1201 Pine, Brunswick
 Willis, Mrs. T. V., 1310 Palmetto Ave., Brunswick

Ware County

President, Mrs. A. M. Knight, Waycross
 Adkins, Mrs. H. T., 2007 Cherokee Drive, Waycross
 *Atwood, Mrs. G. E., 1110 Elizabeth St., Waycross
 Bates, Mrs. W. B., 1306 Elizabeth St., Waycross
 Bradley, Mrs. D. M., 629 Nichols St., Waycross
 Bussell, Mrs. B. R., 604 Euclid Ave., Waycross
 *Carswell, Mrs. H. J., 505 State St., Waycross
 Collins, Mrs. B. E., 2003 Cherokee Drive, Waycross
 Davis, Mrs. F. E., Churchwell Apts., Waycross
 DeLoach, Mrs. A. W., 1015 Cherokee Drive, Waycross
 Ferrell, Mrs. T. J., 1521 St. Marys Drive, Waycross
 Flanagan, Mrs. W. M., 909 Carswell Ave., Waycross
 Folks, Mrs. W. M., Cherokee Drive, Waycross
 Gay, Mrs. J. R., 504 Ava St., Waycross
 Hafford, Mrs. W. C., 229 Rievside Drive, Waycross
 Johnson, Mrs. R. L., 509 Nicholls St., Waycross
 Knight, Mrs. A. M., Jr., 110 Thomas St., Waycross
 Massey, Mrs. C. M., Churchwell Apts., Waycross
 McCullough, Mrs. K., 1014 Satilla Blvd., Waycross
 Minchew, Mrs. B. H., 412 Williams St., Waycross
 *Mixon, Mrs. W. D., 619 Nicholls St., Waycross
 Muecke, Mrs. H. W., 310 Dean Drive, Waycross
 Oden, Mrs. L. H., Jr., Park Ave., Blackhear
 Penland, Mrs. J. E., 912 Elizabeth St., Waycross
 Pierce, Mrs. L. W., 1003 Atlantic Ave., Waycross
 Pomeroy, Mrs. W. L., 1421 St. Marys St., Waycross
 Reavis, Mrs. W. F., 1105 Satilla Blvd., Waycross
 Seaman, Mrs. H. A., 802 Brunel St., Waycross
 Smith, Mrs. Leo, 1507 St. Marys Drive, Waycross
 Stamps, Mrs. E. R., Macon

Stoner, Mrs. W. P., 707 Haines Ave., Waycross
 *Walker, Mrs. J. L., 502 Gilmore St., Waycross
 Wilmer, Mrs. C. A., 501 Gilmore St., Waycross

Crisp County

Adams, Mrs. Charles, 714 15th Ave. E., Cordele
 *Cannon, Mrs. Maud, Cordele
 Dorminey, Mrs. J. N., 315 5th Ave. E., Cordele
 Gower, Mrs. O. T., Jr., 505 13th Ave. E., Cordele
 Harvard, Mrs. V. O., Arabia
 McArthur, Mrs. Charles E., 703 20th Ave. E., Cordele
 Smith, Mrs. M. R., Sr., 606 13th Ave. E., Cordele
 Wheelchel, Mrs. A. J., 505 12th Ave. E., Cordele
 Williams, Mrs. L. E., Albany Road, Cordele
 Williams, Mrs. P. L., Sr., 502 11th Ave., Cordele
 Williams, Mrs. P. L., Jr., 502 11th Ave., Cordele
 Wootten, Mrs. L. O., Jr., 19th Ave. E., Cordele
 Wootten, Mrs. L. O., Sr., 201 11th Ave., Cordele

South Georgia

President, Mrs. Ira M. Gibson, Valdosta
 Austin, Mrs. G. J., Jr., Valdosta
 Burns, Mrs. D. L., Valdosta
 Campbell, Mrs. J. L., Jr., Valdosta
 Eldridge, Mrs. F. G., Valdosta
 Gibson, Mrs. Ira M., Valdosta
 Johnson, Mrs. A. M., Valdosta
 Little, Mrs. A. G., Jr., Valdosta
 McKey, Mrs. Earl S., Jr., Valdosta
 Mixson, Mrs. E. Harry, Valdosta
 Mixson, Mrs. J. F., Valdosta
 Mixson, Mrs. J. F., Jr., Valdosta
 Owens, Mrs. B. G., Valdosta
 Perry, Mrs. Robert E., Valdosta
 Saunders, Mrs. A. F., Valdosta
 Sherman, Mrs. Henry T., Valdosta
 Smith, Mrs. J. R., Hahira
 Smith, Mrs. T. H., Valdosta
 Stump, Mrs. Robert L., Jr., Valdosta
 Williams, Mrs. T. C., Valdosta

NINTH DISTRICT

Manager: Mrs. C. J. Roper, Jasper

Jackson-Barrow Counties

President, Mrs. Paul Scoggins, Commerce
 Almond, Mrs. C. B., Winder
 Bryson, Mrs. L. R., Jefferson
 Etheridge, Mrs. E. H., Winder
 Freeman, Mrs. Ralph, Hoschton
 Harris, Mrs. E. R., Winder
 Lord, Mrs. C. B., Jefferson
 McDonald, Mrs. E. M., Winder
 Pittman, Mrs. O. C., Commerce
 Randolph, Mrs. W. Q., Winder
 Randolph, Mrs. W. T., Winder
 Rogers, Mrs. A. A., Jr., Commerce
 Rogers, Mrs. A. A., Sr., Commerce
 *Ross, Mrs. S. T., Winder
 Russell, Mrs. A. B., Winder
 Scoggins, Mrs. Paul Commerce
 Stovall, Mrs. J. T., Jefferson

*Honorary members.

Cherokee-Pickens Counties

Andrews, Mrs. Charles R., Canton
 *Boring, Mrs. James R., Canton
 Brooke, Mrs. James R., Canton
 Coker, Mrs. Grady N., Canton
 *Coker, Mrs. N. J., Canton
 *Faulkner, Mrs. George, Canton
 Hendrix, Mrs. Arthur M., Canton
 *Hendrix, Mrs. M. G., Ball Ground
 Jones, Mrs. Robert T., III, Canton
 Looper, Mrs. Ben K., Canton
 *Pettit, Mrs. John T., Canton
 Roper, Mrs. C. J., Jasper
 Roper, Mrs. E. A., Jasper
 *Turk, Mrs. John, Nelson
 Van Sant, Mrs. T. J., Woodstock

Gwinnett County

President, Mrs. R. E. Smith, Buford
 Cain, Mrs. Sylvester, Norcross
 Chastain, Mrs. J. R., Buford
 Hutchins, Mrs. Harry, Buford
 Hutchins, Mrs. W. J., Buford
 Kelley, Mrs. D. C., Lawrenceville
 Puett, Mrs. W. W., Norcross
 Sims, Mrs. Fayette A., Jr., Lawrenceville
 Smith, Mrs. R. E., Buford
 Williams, Mrs. A. D., Lawrenceville

Habersham County

President, Mrs. L. J. Walker, Cornelia
 Arrendale, Mrs. J. J., Cornelia
 Garrison, Mrs. D. H., Clarkesville
 Harden, Mrs. O. N., Cornelia
 *Jackson, Mrs. John Brady, Cornelia
 Nicholson, Mrs. Geo. T., Cornelia
 Roberts, Mrs. B. J., Clarkesville
 Walker, Mrs. J. L., Cornelia

Stephens County

President, Mrs. Arthur G. Singer, Toccoa
 Ayers, Mrs. Clarence L., Big A Road, Toccoa
 Chaffin, Mrs. E. F., 743 E. Tugalo Toccoa
 Henry, Mrs. Charles M., Mountain View Road, Toccoa
 Isbell, Mrs. J. E. D., 706 E. Tugalo, Toccoa
 McNeely, Mrs. Henry H., 121 Hayes St., Toccoa
 Schaefer, Mrs. William Bruce, 110 E. Franklin, Toccoa
 Shiflet, Mrs. Robert E., Big A Road, Toccoa
 Singer, Mrs. Arthur G., 210 Boulevard, Toccoa
 Good, Mrs. William H., Jr., Currahee Road, Toccoa

**TENTH DISTRICT
Richmond County**

President, Mrs. J. P. Hitchcock, Augusta
 Agee, Mrs. M. P., 3028 Cardinal Drive, Augusta
 Akerman, Mrs. Joseph, 831 15th St., Augusta
 Bailey, Mrs. T. E., 2548 Central Ave., Augusta
 Battey, Mrs. W. W., Jr., 2239 Kings Way, Augusta
 *Battey, Mrs. W. W., Sr., 822 Hickman Road, Augusta
 Bazemore, Mrs. J. Malcolm, 3023 Pine Needle Road, Augusta

Beard, Mrs. Byron C., Country Club Apts., Augusta
 Bowen, Mrs. J. B., 1538 Schley St., Augusta
 Boyd, Mrs. W. S., 2315 Laurel Lane, Augusta
 Brittingham, Mrs. J. W., 3046 Pine Needle Road, Augusta
 Brown, Mrs. Stephen W., 3018 Bransford Road, Augusta
 Burpee, Mrs. C. M., 1127 Monte Sano Ave., Augusta
 Butler, Mrs. J. H., 1103 Milledge Road, Augusta
 Chandler, Mrs. J. L., 2923 Lake Forest Drive, Augusta
 Chaney, Mrs. Ralph H., Jr., 2651 Henry St., Augusta
 Chaney, Mrs. R. H., Sr., 2918 Bransford Road, Augusta
 Clary, Mrs. T. L., Jr., 1329 Highland Ave., Augusta
 Davis, Mrs. David A., 2728 Walton Way, Augusta
 DeVaughn, Mrs. N. M., 802 Monte Sano Ave., Augusta
 Estes, Mrs. Marion M., Lumpkin Road, Augusta
 Flanagan, Mrs. W. S., 2431 McDowell St., Augusta
 Greenblatt, Mrs. R. B., 3011 Bransford Road, Augusta
 Harper, Mrs. H. T., 2739 Walton Way, Augusta
 Harrison, Mrs. F. N., 1502 Pendleton Ave., Augusta
 Hitcheock, Mrs. J. P., 827 Milledge Road, Augusta
 Hock, Mrs. C. W., 909 Highland Ave., Augusta
 Holmes, Mrs. L. P., 2810 Hillcrest Ave., Augusta
 Hopkins, Mrs. E. C., 2353 Minto, Augusta
 Hummell, Mrs. J. E., 1751 Pine Tree Road, Augusta
 Jones, Mrs. G. Frank, Laurel Lane, Augusta
 Kelly, Mrs. G. L., 2131 Gardner St., Augusta
 Lee, Mrs. F. Lansing, 901 Heard Ave., Augusta
 Leonard, Mrs. R. E., 2903 Lake Forest Drive, Augusta
 Levy, Mrs. Jack H., 307 Broad St., Augusta
 Lokey, Mrs. Julian L., Country Club Apartments, Augusta
 Major, Mrs. R. C., 1402 Magnolia Drive, Augusta
 Martin, Mrs. I. M., Milledgeville Road, Box 502, Rt. 2, Augusta
 Massengale, Mrs. L. R., Laurel Lane, Augusta
 Mathews, Mrs. W. E., 2735 Walton Way, Augusta
 McGahee, Mrs. R. C., 2617 Hillcrest Ave., Augusta
 Mealing, Mrs. H. G., 103 Forest Ave., W., North Augusta, S. C.
 Miller, Mrs. A. W., 314 Broad St., Augusta
 Miller, Mrs. J. M., 2837 Helen St., Augusta
 Milligan, Mrs. K. W., 942 Greene St., Augusta
 Mulherin, Mrs. Charles M., 2236 McDowell St., Augusta

Murphey, Mrs. Eugene E., 432 Telfair St., Augusta
 New, Mrs. J. S., 625 Milledge Road, Augusta
 Palmer, Mrs. J. R., Walton Way Extension, Augusta
 Perkins, Mrs. H. R., 1118 Milledge Road, Augusta
 Pinson, Mrs. H. D., 1751 Kings Wood Drive, Augusta
 Rhodes, Mrs. R. L., 2501 Bellview Ave., Augusta
 Rinker, Mrs. J. Robert, 2114 Gardner St., Augusta
 Risteen, Mrs. W. A., Skinner Mill Road, Rt. 1, Box 27, Martinez
 Sanderson, Mrs. E. S., 1030 Katherine St., Augusta
 Schmitt, Mrs. H. L., Jr., 2910 Henry St., Augusta
 Sell, Mrs. M. B., 1314 Milledge Road, Augusta
 Sheppard, Mrs. Walter L., LaFayette Drive, Augusta
 Sherman, Mrs. J. H., 2251 Walton Way, Augusta
 Templeton, Mrs. C. M., 910 Carolina Ave., North Augusta, S. C.
 Tessier, Mrs. C. E., 1320 Buena Vista Road, Augusta
 Todd, Mrs. Lucius N., 3005 Wrightsboro Road, Augusta
 Torpin, Mrs. Richard, 2618 Walton Way, Augusta
 Traylor, Mrs. G. A., 2311 Kings Way, Augusta
 Volpito, Mrs. P. P., 3024 Bransford Road, Augusta
 Watson, Mrs. W. G., 619 West Avenue, North Augusta, S. C.
 White, Mrs. William O., Jr., Heath Drive, Augusta
 Wilkes, Mrs. W. A., 1203 Highland Avenue, Augusta
 Williams, Mrs. D. C., Jr., 13-B Country Club Apartments, Augusta
 Williams, Mrs. W. J., 1107 Johns Road, Augusta
 Wright, Mrs. P. B., 3037 Park Ave., Augusta
 Wylie, Mrs. M. H., 3126 Bransford Road, Augusta
 Fuller, Mrs. W. A., 603 Peachtree Road, Augusta
 Thompson, Mrs. C. E., 1303 Monte Sano, Augusta

**Members-at-Large,
1950-1951**

Alexander, Mrs. G. A., Forsyth
 Arnold, Mrs. Maurice F., Hawkinsville
 Bridges, Mrs. R. R., Leary
 Brown, Mrs. S. D., Royston
 Busey, Mrs. T. J., Fayetteville
 Bush, Mrs. Albert R., Hawkinsville
 Claxton, Mrs. E. B., Duhlin
 Dickens, Mrs. O. H., Madison
 Ehrlich, Mrs. M. A., Bainbridge
 Elliott, Mrs. C. B., Cedartown
 Fisher, Mrs. Albert, Jr., Monticello
 Gallemore, Mrs. J. L., Perry
 Goodwin, Mrs. H. A., Summerville
 Green, Mrs. Charles Gray, Waynesboro
 Harris, Mrs. Raymond, Ocilla

*Honorary members.

Hyden, Mrs. William U., Trion
 Little, Mrs. G. H., Trion
 Little, Mrs. R. N., Summerville
 Mashburn, Mrs. Marcus, Sr., Cum-
 ming
 McCarver, Mrs. W. C., Vidette
 Milford, Mrs. J. H., Hartford

Powell, Mrs. C. E., Swainsbroo
 Ridgway, Mrs. R. E., Royston
 Robbins, Mrs. A. I., Homerville
 Simonton, Mrs. F. H., Chicka-
 mauga
 Simpson, Mrs. A. W., Jr., Wash-
 ington

Thompson, Mrs. Cleveland, Waynes-
 boro
 Thompson, Mrs. D. N., Elberton
 Tucker, Mrs. J. P., Bainbridge
 Wasden, Mrs. H. A., Jr., Pavo
 Williams, Mrs. Virgil B., Griffin
 Willis, Mrs. L. W., Bainbridge

CALLS FOR SUPPORT OF BETTER WORLD HEALTH PROGRAMS

There is likely to be a great demand for qualified American medical personnel to aid in the overseas health programs being conducted by the World Health Organization of the United Nations, according to Dr. Edward J. McCormick of Toledo, Ohio.

Dr. McCormick, a member of the Board of Trustees of the American Medical Association and a member of the United States delegation to the third WHO assembly in Geneva, Switzerland, last May, said these programs demand the full support of the American medical profession. He characterized the projects as "an essential part of the over-all effort of the freedom-loving nations of the world to create conditions which will provide a firm foundation for a lasting peace."

Writing in the October 7 *Journal of the American Medical Association*, he said:

"The World Health Organization is engaged in a gigantic task. It is concerned with raising standards of medical education, fortifying national health services, assisting in control campaigns against infectious diseases and modifying and classifying medical information of international importance.

"The WHO works closely with the World Medical Association (composed of 39 national medical associations, including the A.M.A.) on technical problems. It works with governments in raising health standards in member countries. The WHO is meeting a real need in this shrinking world in fulfilling the obligations of an international public health agency."

The WHO was formed in June 1946 and its constitution recognizes that the "health of all people is fundamental to the attainment of peace and security and is dependent upon the fullest cooperation of individuals and states." At the third assembly, delegates were present from 57 member states. All of the members of the Soviet block, with the exception of Poland, have withdrawn, and Poland did not send a delegate.

"This meeting of delegates from nearly all the non-communist nations of the world assures the continuity of cooperation in public health and determines the strategy for the international offensive against the major diseases," Dr. McCormick said.

When the WHO was formed, malaria, maternal and child health, tuberculosis, environmental sanitation, venereal diseases and nutrition were assigned priorities. At the last meeting, plague, cholera, yellow fever, smallpox and typhus were added to the list of priority programs.

The United States will provide \$2,481,159, or approximately one third, of the 1951 budget of \$7,300,000.

HEALTHGRAMS

Nothing is more completely proved than the fact that approximately one-half of all cases of significant tuberculosis have no symptoms, or symptoms so slight as to escape notice. A. C. Christie, M.D., *Puh. Health. Rep.*, June 2, 1950.

* * *

The continued responsibility for the care of a chronically sick person adds immeasurably to the education of a physician. It requires maturity to be able to recognize limitations, to avoid becoming angry because the patient does not get well, to avoid becoming discouraged or discouraging, and to continue to wish to help within the limits of one's ability. John Romano, M.D., *J.A.M.A.*, June 3, 1950.

SUCCESS

He has achieved success who has lived well, laughed often and loved much; who has gained the respect of intelligent men, the trust of pure women and the love of little children; who has made the world a better place than he found it, whether by an improved poppy, a perfect poem or a rescued soul; who has never lacked appreciation of earth's beauty or failed to express it; who has looked for the best in others and given them the best he had; whose life is an inspiration.—Copied.

CORTISONE, ACTH FOUND HELPFUL IN TREATING SERIOUS SKIN DISEASE

Good results are reported by a group of doctors at Mount Sinai Hospital in New York who have used cortisone and ACTH to treat patients critically ill with acute disseminated lupus erythematosus, a serious disease beginning with a skin disorder and spreading to the heart, lungs, kidneys and other vital organs.

Writing in the October issue of *Archives of Internal Medicine*, published by the American Medical Association, Drs. Louis J. Soffer, Marvin F. Levitt and George Baehr caution, however, that "although these agents are capable of inducing clinical remissions they do not affect a cure of the underlying disease process."

Of the 14 patients treated with the hormones, 11 responded to the extent that the acute evidence of the disease promptly subsided and the patient could move about more comfortably. However, the diseased cells, the anemia, the abnormal kidney findings and other characteristics of the disease persisted.

The report continues:

"The treatment of acute disseminated lupus with cortisone or ACTH may be complicated by frequent untoward side effects. However, with careful clinical observation these effects may be minimized and corrected and therapy continued.

"The exacerbations which follow attempts to discontinue therapy indicate that long-range or even permanent treatment may be necessary to control the disease."

WHAT IS HEART DISEASE?

Each year more deaths occur from heart disease than from any other single cause. The Educational Committee of the Illinois State Medical Society, in a *Health Talk*, states that knowledge and care could reduce deaths from the many illnesses which stem from conditions affecting the heart.

Acting like a pump, the heart circulates the blood through the body. The heart itself is composed of a mass of muscles forming four chambers which receive the blood brought to it from all parts of the body through the veins. This blood is first pumped to the lungs, where it receives fresh oxygen, and goes back to the heart, from which it is again passed out to every part of the body through the arteries. After it has distributed its oxygen and other essential substances to the individual organs, it is collected into tiny vessels called capillaries, which feed it into the veins and thus back to the heart. The essentials of the circulation of the blood were discovered in 1615 by William Harvey, an English physician.

In the heart there is a series of chambers to let the blood in and out, a procedure systematically controlled by a series of valves. The four chambers of the heart are the right and left ventricles and the

right and left auricles. The veins pour the blood into the right side of the heart, from which the ventricle pumps it out to the lungs through the pulmonary artery. It returns oxygenated from the lungs to the left side of the heart, from which the left ventricle pumps it into the aorta or main artery, which distributes it through the arterial system throughout the body. There are thus four elements in heart action, the correct timing of which is controlled by a nerve "switchboard." Any trouble with the nerve control or any of the four chambers or with the valves which keep the flow going in the proper direction can thus be a source of heart disease.

The six most important causes of heart disease are rheumatic fever, which may damage the valve system; high blood pressure, which may overload the heart; sclerosis or hardening of the coronary arteries which supply blood to the heart muscle itself; syphilis, which especially affects the first part of the great artery, the aorta; subacute bacterial endocarditis, due to inflammation of the inner lining membrane and valves of the heart by a germ, streptococcus viridans, and congenital defects, meaning those existing at birth. Other conditions may damage the pericardium or outer covering of the heart.

Thus certain diseases may cause damage, slight or great, to the heart. Among specific heart conditions are angina pectoris, a pain in the chest which sometimes extends down the arm, and caused by interference with the blood supply to the heart muscle; coronary thrombosis or occlusion, caused by a clot of blood forming in a hardened artery to block off the flow of blood to the heart muscle; myocarditis, or inflammation of the muscular walls of the heart, and chronic valvular disease of the heart. Various conditions can be responsible for so-called heart murmurs, or irregular heart beat, interruption of the blood to and from the heart.

Thus there are many specific types of heart disease, each of which is influenced by different factors.

Heart disease can be reduced. Let your doctor check your heart so that it cannot check you.

OBITUARY

(Continued from Page 544)

Atlanta, in 1892, and practiced in Atlanta for many years, before moving to Barnesville where he lived until his retirement several years ago. He was a member of the Emory Presbyterian Church, and for 39 years had been a member of Lodge No. 41, F. & A. M. Surviving are his wife; two daughters, Mrs. Edward R. Terrell and Mrs. Curtis Thompson; a son E. C. Ripley, Jr., several grandchildren and great-grandchildren. Private funeral services were held at the residence with the Rev. Donald Bailey officiating. Burial was in the Barnesville Cemetery, Barnesville.

* * *

Dr. Clyde B. Slocumb, aged 63, prominent Doerun and Colquitt County physician, died October 29, 1950. He graduated from the Atlanta School of Medicine, now Emory University School of Medicine, Atlanta, in 1912, and began the practice of medicine in Funston. He later moved to Doerun, serving this community and Colquitt County for 38 years. He was an honorary member and past president of the Colquitt County Medical Society, the Medical Association of Georgia, and the American Medical Association. He was also a member of the Doerun Baptist Church. Surviving are his wife; a daughter, Mrs. R. D. Houser, Athens; two sons, Lt. Col. Clyde Slocum, Jr., Washington, D. C. and Billy Slocumb, Doerun and Moultrie; two sisters and five grandchildren. Funeral services were held at the Doerun Baptist Church with the Rev. Milton S. Overby and the Rev. T. H. Wilder officiating. Burial was in the Doerun Cemetery.

Dr. Charles D. Ward, aged 60, one of Augusta's best known and highly esteemed surgeons, died unexpectedly at a fishing camp on Briar Creek, October 12, 1950. He had gone on a fishing trip with Dr. Goodrich Henry, who found he had died in his sleep, apparently of a heart attack. Dr. Ward was born in Villanow, Walker County, Ga. He was the son of the late John Anderson and Mrs. Lou Puryear Ward. He graduated from the University of Georgia Medical College, Augusta, in 1920, and began the practice of medicine in his home town, and came to Augusta in 1921, where he spent his entire medical career. He was a member of the Richmond County Medical Society, the Medical Association of Georgia, and the American Medical Association. In 1925, he became resident surgeon at the University Hospital, Augusta. He was instructor in surgery at the Medical College of Georgia, later he became clinical associate instructor in surgery, and in 1936 he became assistant clinical professor in surgery at the Medical College of Georgia. He had attained top recognition in the field of surgery and had published a number of papers on medical subjects. Dr. Ward was not only widely known as a surgeon but was loved by all who knew him. Dr. Ward was a bachelor. He is survived by a sister, Mrs. Joe Hunt, of East Armuchee, and one nephew, Louis Hunt, student at the University of Georgia, Athens. Funeral services were held at the East Armuchee Baptist Church, of which he was a member, with the Rev. Roy Easterly and the Rev. J. A. Smith officiating. Burial was in the churchyard cemetery, Villanow.

NEW BOOKS

Principles of Internal Medicine, by T. R. Harrison, M.D., 1,590 pages with 245 illustrations. Philadelphia, The Blakiston Company, 1950. Price \$12.00.

This new text of internal medicine was written with the aim of presenting within the confines of a single volume a consideration of the disorders that comprise the province of internal medicine. In this intention it is admirably successful.

Edited by Dr. T. R. Harrison, with the able assistance of Drs. Paul B. Beeson, William H. Resnik, Georgia W. Thorn, M. M. Wintrobe and forty-eight contributing authorities, the book is divided into seven parts comprising the cardinal manifestations of disease, physiologic considerations, reaction to stress and to antigenic substances, metabolic and endocrine disorders, disorders due to chemical and physical agents, diseases due to biologic agents and diseases of organ systems.

Considerably more emphasis is placed on the functional approach to internal medicine in the first five parts of this book than is found in the older standard texts of medicine. In general diseases of greater numerical frequency are discussed in more detail than rare disorders.

Physicians in the State of Georgia will note with pride that nine of the contributors to this text reside within the State. Among them are Drs. Paul B. Beeson, Philip Kramer Bondy, William F. Friedewald, W. Elizabeth Gambrell, Albert Heyman, Max Michael, Jr., J. C. Ransmeier and Arthur P. Richardson, all associated with the Emory University School of Medicine, and Dr. T. F. Sellers, Director of the Georgia Department of Public Health.

This book is recommended to students of medicine and the practicing physician as one of the best texts available in the specialty of internal medicine.

EDGAR SHANKS, JR., M.D.

* * *

Atlas of Human Anatomy, by Barry J. Anson, Ph.D., Professor of Anatomy, Northwestern University Medical School, Chicago. 518 pages, 8x11 inches, illustrated.

(Continued on Page XVI)



"A high percentage of cases of seasickness and carsickness can be aborted or prevented by suitable doses of dimenhydrinate (Dramamine)."

—Council on Pharmacy and Chemistry, New and Nonofficial Remedies, J.A.M.A. 143:815 (July 1) 1950.



DRAMAMINE[®] Brand of Dimenhydrinate—for the prevention or treatment of motion sickness—is supplied in 50 mg. tablets and in liquid form.



RESEARCH IN THE SERVICE OF MEDICINE **SEARLE**

Please mention this Journal when writing advertisers.

NEW BOOKS

(Continued from Page 556)

Philadelphia and London. W. B. Saunders Company, 1950. Price: \$11.50.

This atlas, which is based on the dissections of the author, is one of the latest published and has received much acclaim. Dr. Anson stated that the purpose of the atlas was "to be of service to students in medicine and to practitioners for whom illustrations must serve in substitution for actual specimens." Only essential descriptive matter is included so that the medical student will not be slowed down in the dissection laboratory. The hundreds of drawings, many of which are in color, were prepared for Dr. Anson by professional artists working with the cadaver as a model. This book would be a great asset to any physician's or student's library.

THE NEW ORLEANS GRADUATE MEDICAL ASSEMBLY

The fourteenth annual meeting of The New Orleans Graduate Medical Assembly will be held March 5-8, 1951, headquarters at the Municipal Auditorium, New Orleans.

Nineteen outstanding guest speakers will participate and their presentations will be of interest to both specialists and general practitioners. The program will include a panel discussion on ACTH and Cortisone, a series of talks on trauma and neoplastic diseases, a review of the application of radioactive isotopes in medical practice, clinicopathologic conferences, round-table luncheon discussions and many other features of special interest.

Another attraction of the meeting will be daily demonstrations of medical and surgical procedures in color television. This program will be telecast from Charity Hospital to the auditorium and is sponsored

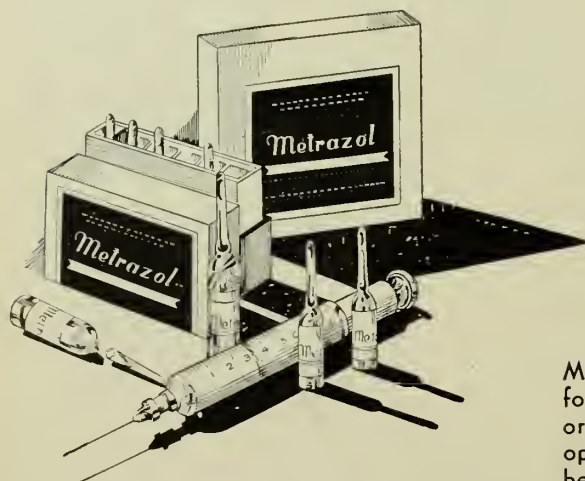
by Smith, Kline & French Laboratories.

The Assembly has planned another interesting post-clinical tour to follow the 1951 meeting in New Orleans. On Saturday, March 10, a party composed of doctors and their families will leave by plane for Panama. The itinerary also includes Medellin and Cali, Colombia; Quito, the capital of Ecuador, and Lima, Peru. Medical programs and visits to hospitals have been arranged, together with a full schedule of sightseeing. The group will return to New Orleans on Sunday, March 25. Details and a complete itinerary are available at the office of the Assembly, Room 103, 1430 Tulane Avenue, New Orleans 12, La.

FOR SALE—Tice's Loose Leaf System of Medicine. Half of normal sale price. C. R. Sikes, M.D., Grady Mem. Hospital, 36 Butler St., S. E., Atlanta, Ga.

WANTED

Resident psychiatrist, Graduate of Class A medical school and with adequate hospital training for work in private mental institution located in ideal climate. Excellent salary and maintenance. If interested in employment under excellent conditions near thriving southern city, apply immediately to Orin R. Yost, M.D., Psychiatrist-in-Chief, Edgewood Sanitarium Foundation, Orangeburg, S. C.



Metrazol, pentamethylentetrazol
Ampules, 1 cc. and 3 cc.
Sterile Solution, 30 cc. vials
Tablets and Powder

Metrazol

COUNCIL ACCEPTED

A DEPENDABLE, QUICK-ACTING
CEREBRAL AND MEDULLARY
STIMULANT

Metrazol is indicated for narcotic depression, for instance, in poisoning with barbiturates or opiates, in acute alcoholism and during the operation and postoperatively when respiration becomes inadequate because of medullary depression due to the anesthetic.

Inject 3 cc. Metrazol intravenously, repeat if necessary, and continue with 1 or 2 cc. intramuscularly as required.

Bilhuber-Knoll Corp. Orange, N. J.

Please mention this Journal when writing advertisers.

24137*



